Complex upper-voice cadential figures in traditional tonal compositions

David Neumeyer
The University of Texas at Austin

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INTRODUCTION

Harmony and voice-leading (partwriting; counterpoint) are integrated in the hierarchical networks of Schenkerian analyses (Heinrich Schenker, *The Masterwork in Music*; *Free Composition*; *Five Graphic Music Analyses*). The top (most abstract) level of the hierarchy is a fundamental structure or *Ursatz* which combines a single upper voice (melody) and a bass voice (harmony) in counterpoint.

(FUNDAMENTAL STRUCTURE AND CADENCE). Schenkerian analysts overwhelmingly distribute the fundamental structure across a piece as a single extended and elaborated [prolonged] note, followed by a stepwise descent in the final or most important cadence. Therefore, it makes sense to pay close attention to the designs of typical cadences. One pattern that occurs with increasing frequency beginning in the later eighteenth century tends to confer equal status on two upper voices, one from ^5, the other from ^3. I wrote about this some years ago as one option in complex upper-voice figures: "The Three-Voice Ursatz," *In Theory Only* (Michigan Music Theory Society) 10/1-2 (August 1987): 3-29; a critical response by

Steve Larson and my reply appear in issue 10/4 (December 1987): 33-37. The article's argument was that three-part voice leading in the background often provided richer, more complete analyses of the upper voices in traditional tonal compositions. I also made use of the three-part *Ursatz* model for backgrounds with ascending lines in "The Ascending Urlinie," *Journal of Music Theory* 31/2 (1987): 275-303.

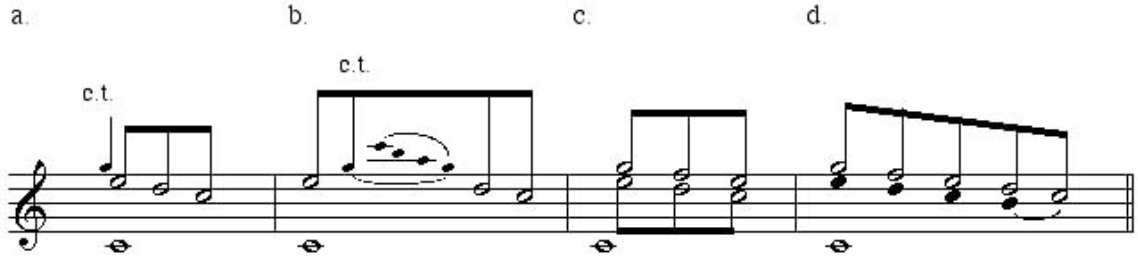
More recently, in connection with rising lines (whether as "alto" or "soprano"), William Rothstein has given qualified support to the three-part *Ursatz* model ("Transformations of Cadential Formulae in the Music of Corelli and His Successors," in *Essays from the Third International Schenker Symposium,* ed. Allen Cadwallader [ildesheim: Olms, 2006], 245-278; see 265-67). Matthew Brown has gone further: he makes the three-part *Ursatz* model a central element in his "rationalized" systematization of Schenker's theory and analytical method (*Explaining Tonality: Schenkerian Theory and Beyond,* Rochester: University of Rochester Press, 2005), because of the ease with which it explains sequence patterns. Channan Willner has also made use of it in his dissertation on Handel ("Durational Pacing in Handel's Instrumental Works: The Nature of Temporality in the Music of the High Baroque," PhD dissertation, City University of New York, 2005). Willner has even productively proposed an extension to a four-voice model: see "The Polyphonic *Ursatz* on Willner's Publications Page.

(THREE-PART COUNTERPOINT). Tonal space (*Tonraum*) is "potential space" for melodic activity, and the assumption that this space can be occupied by only one structural line reflects a problem of strict counterpoint, namely the relationship of two and three-part writing. Schenker follows J. J. Fux in assuming that a two-voiced model is the basis for three-part writing: the third is merely "added." Yet, he also admits that "there exists a continual give-and-take between the demands of the triad for completeness and the principles of voice leading, and the compromise between these two forces reveals the essential nature of three-part writing." [*Counterpoint*]

(COVER TONE). A cover tone is a single tone that appears (and often reappears) above the register defined by the first tone of the fundamental line. The most common instances are ^5 as a cover tone above ^3 , or ^8 as a cover tone above ^5 . Boundary play may be understood as essentially "composing-out" or embellishing of a cover tone (though this definition doesn't cover all instances).

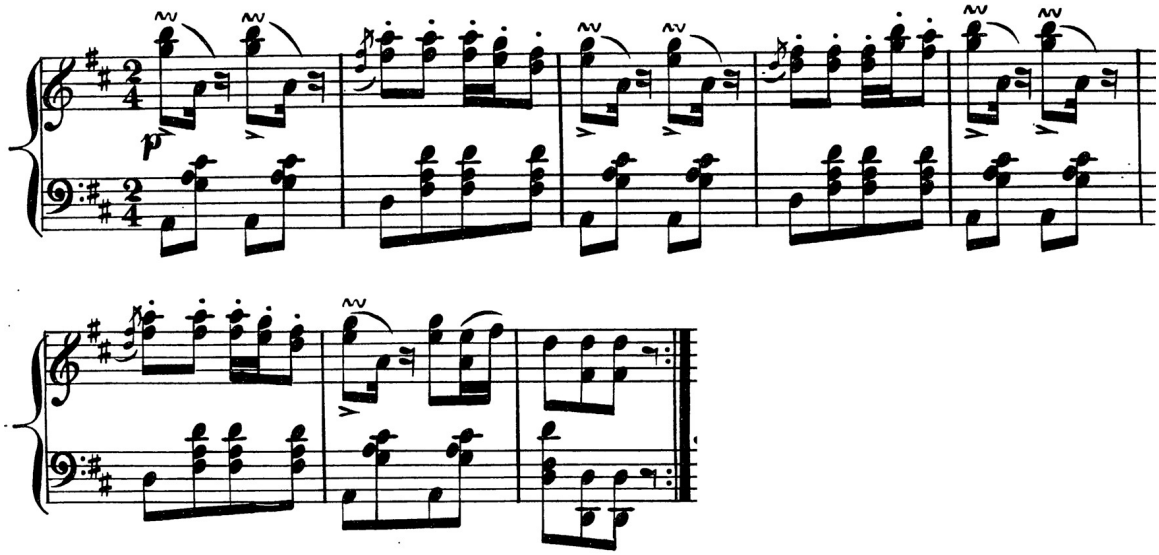
(COVER TONE AND STRUCTURAL VOICE). The 5-3-4-2-(3)-1 figure might be understood as arising from confusion over the roles of structural soprano and cover tone. The potential for this confusion is already present in the fundamental line itself, even the simplest of them, the line from ^3 . The tonal space of this line is the third ^1 -^3. When the ^3 "descends to its rest" (as Schenker puts it) in ^1 (or to the fundamental of the triad), is the tonal space extinguished, or is the ^3 somehow still active as a cover tone -- is it still there in memory? I suggest that the latter is the case: the ^3 is always present, but the force of that presence varies widely, from barely audible through plausibly implied to strongly implied (even to literally present). Context will usually supply a measure of that presence. When ^5 can be heard as a

cover tone, things become more complicated, as another continuum comes into play: ^5 as a "casual" cover tone, ^5 as focus of more elaborate boundary play, ^5 as "in balance" with ^3, to ^5 as the first tone of a fundamental line. These four positions can be notated as follows (Exs. a-d). [This is all written in terms of Schenkerian theory. For a related but distinct model of intervals underlying linear patterns, see my PDF document *Proto-backgrounds* and my article "Thematic Reading, Proto-backgrounds, and Transformations." *Music Theory Spectrum* 31/2 (fall 2009): 284-324.]

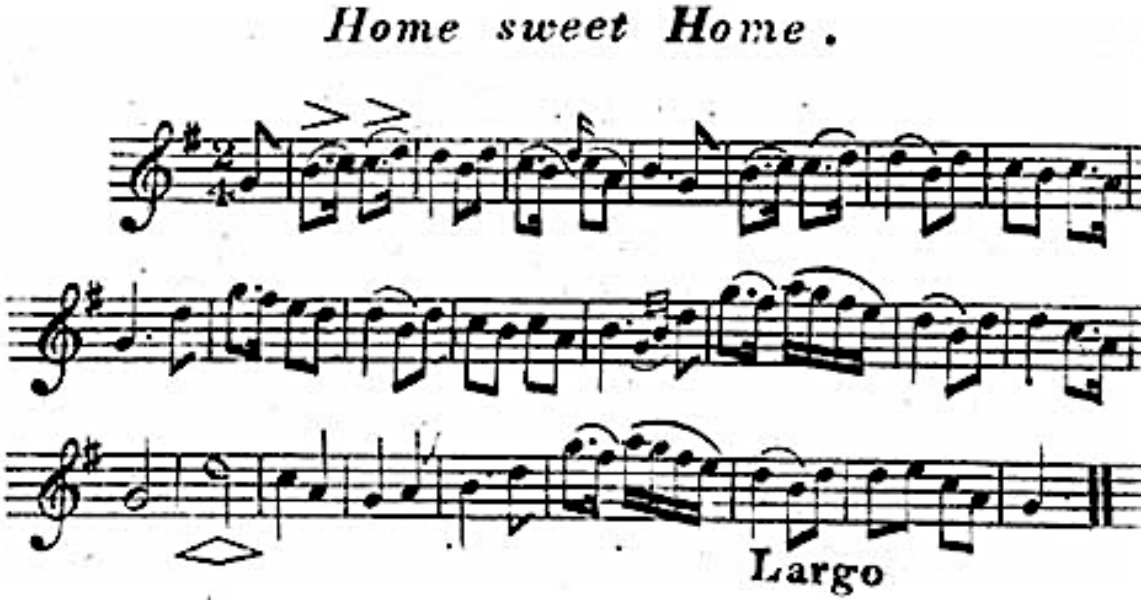


EXAMPLES

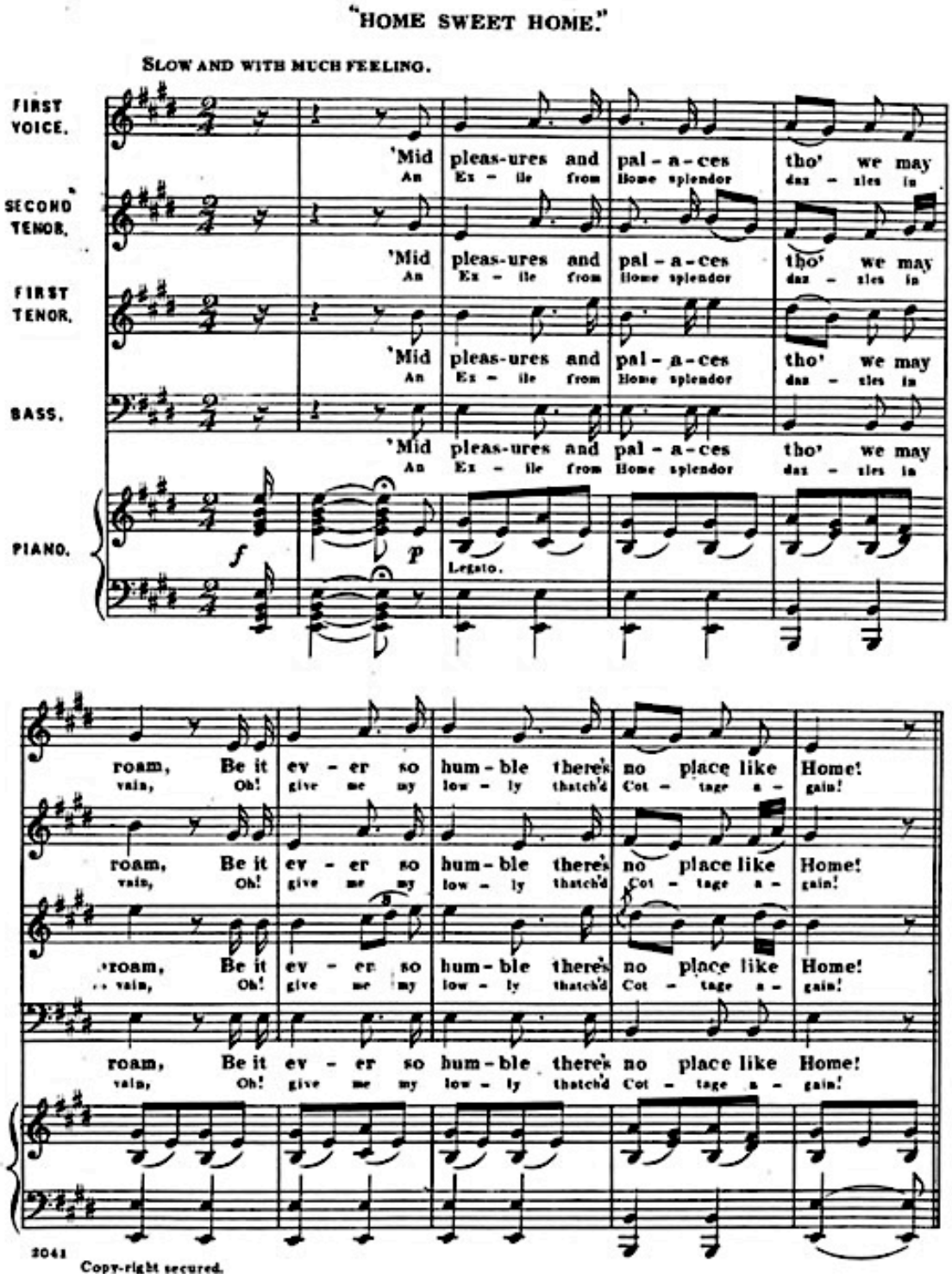
A simple instance of a 5-3-4-2-(3)-1 voice-leading figure is the principal strain of a "Jumping Polka" attributed to Johann Strauss, sr., in an edition for piano published in 1849 (source: Library of Congress American Memory site). A dominant ninth (B5) resolves directly to ^5 in bar 2, and then the dominant seventh resolves to ^3 in bar 4. The figure is repeated in the second phrase, but ^3 is only heard as a brief dissonance over the dominant harmony (bar 7) and the melody note in the final chord is ^1 (D5). (Additional examples from the Strausses may be found in the next section of this document.)



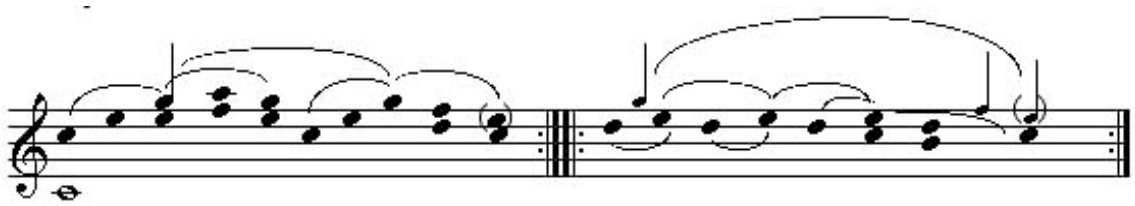
The familiar melody "Home, Sweet Home" is only slightly more complicated. The design is simple, with several repetitions of the full 5-3-4-2-(3)-1 figure and ^8 as an obvious isolated cover tone. The version of the melody presented here was published in a pedagogical anthology of pieces for keyed bugle. The anthology is titled *The Souvenir*; my copy came from the collection of the late Professor Douglass Green. The volume is undated but probably was published sometime in the 1830s or 1840s.

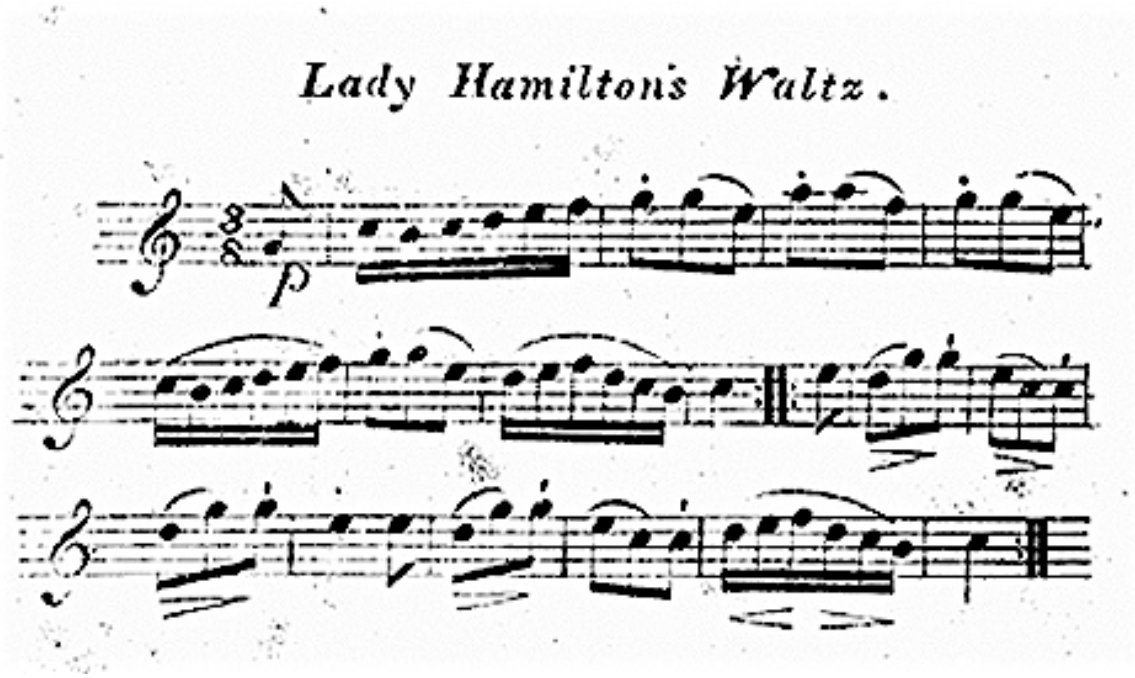


An alternate version of "Home, Sweet Home" for men's chorus makes the implied ^3 even stronger by changing ^2 to ^7 in the cadence, so that a diminished fifth is heard with the strong tendency tones ^4 and ^7. The ^3 (G#4) is literally present in the piano accompaniment. This score is on the Library of Congress American Memory site -- search by title.

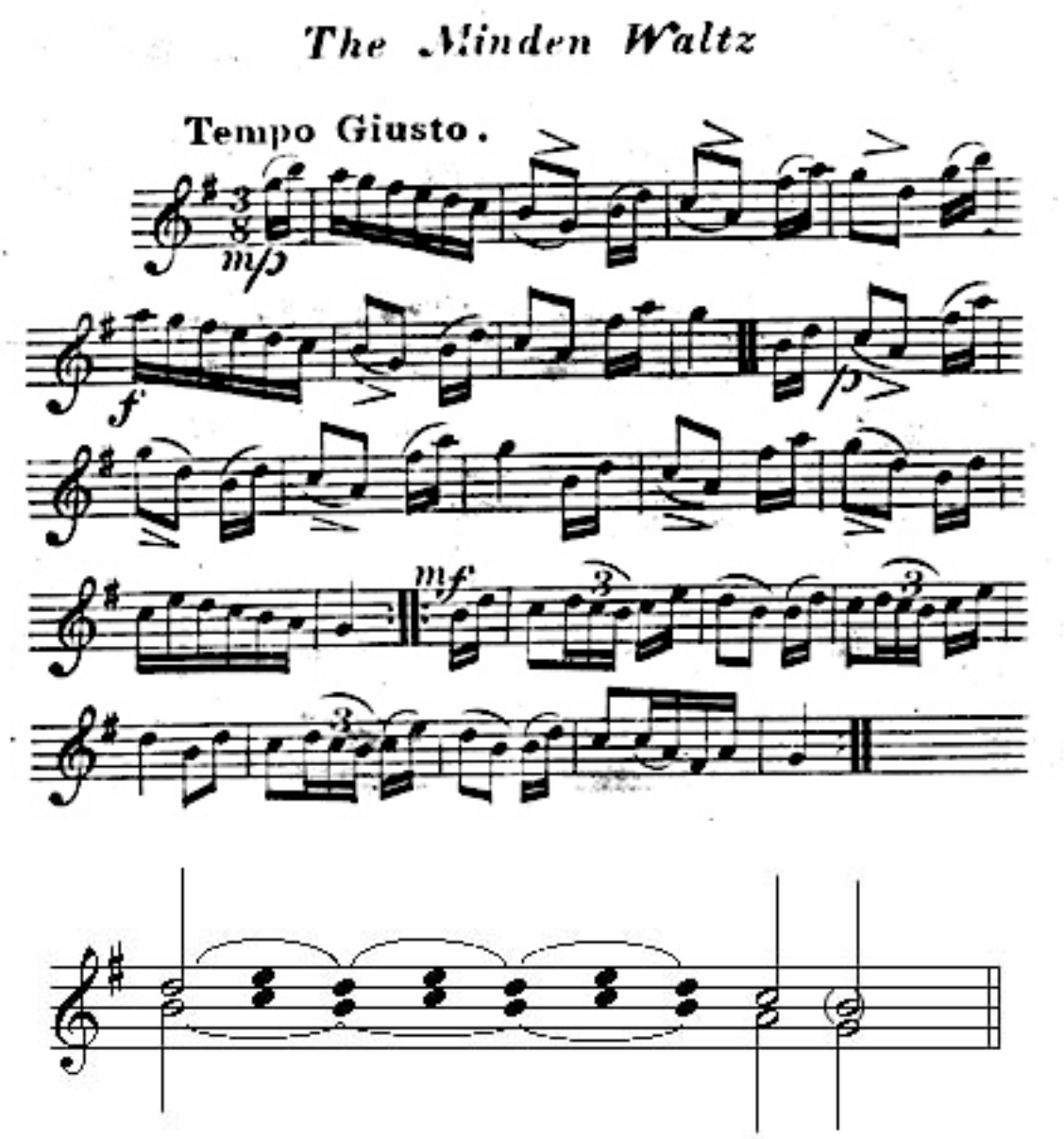


In another piece from *The Souvenir*, "Lady Hamilton's Waltz," the 5-3-4-2-(3)-1 figure is very direct in the first strain, not quite so obvious in the second, where the repetitions of ^3 and its neighbor reduce ^5 and its descent to boundary play (shown with smaller notes).

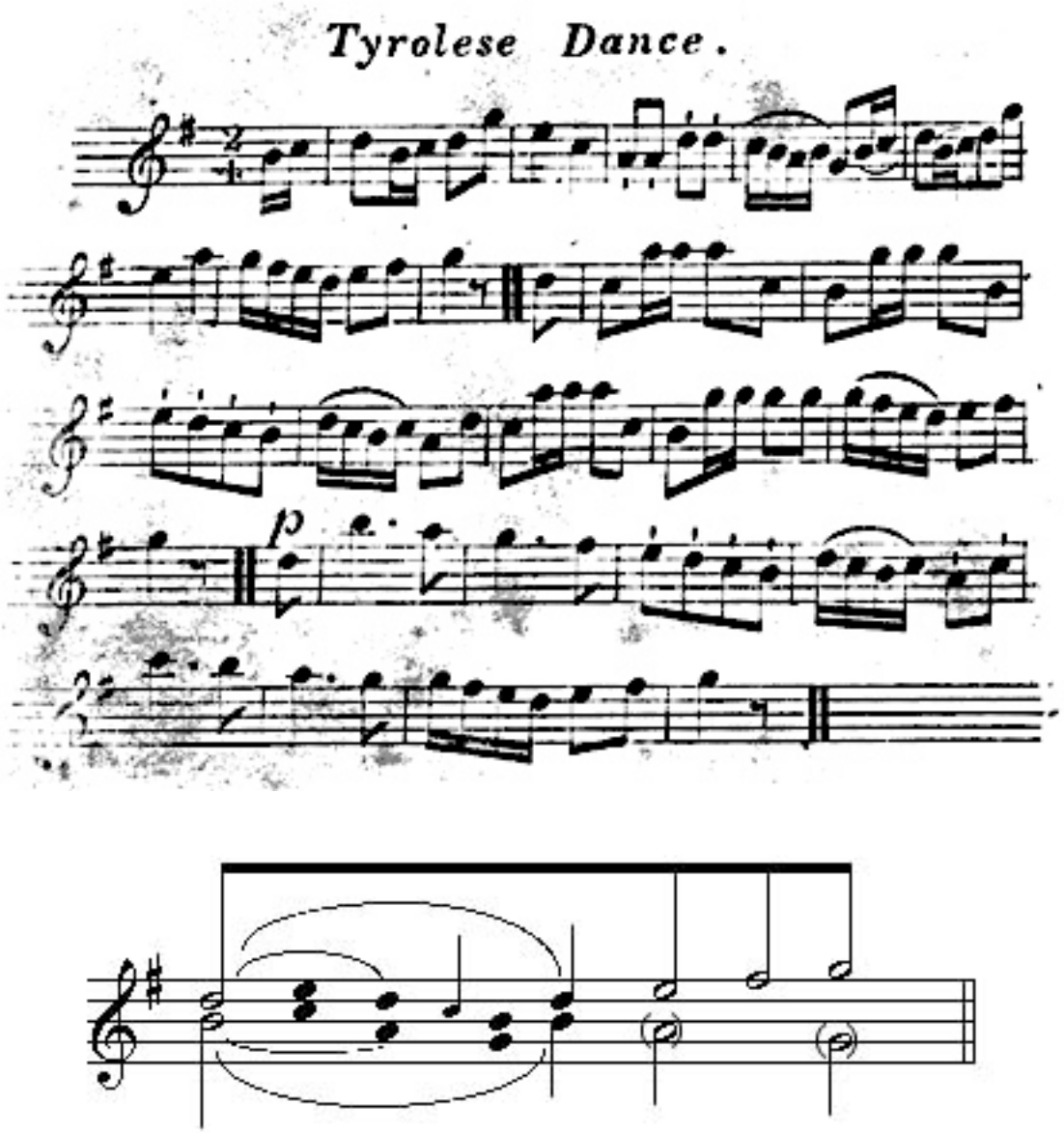




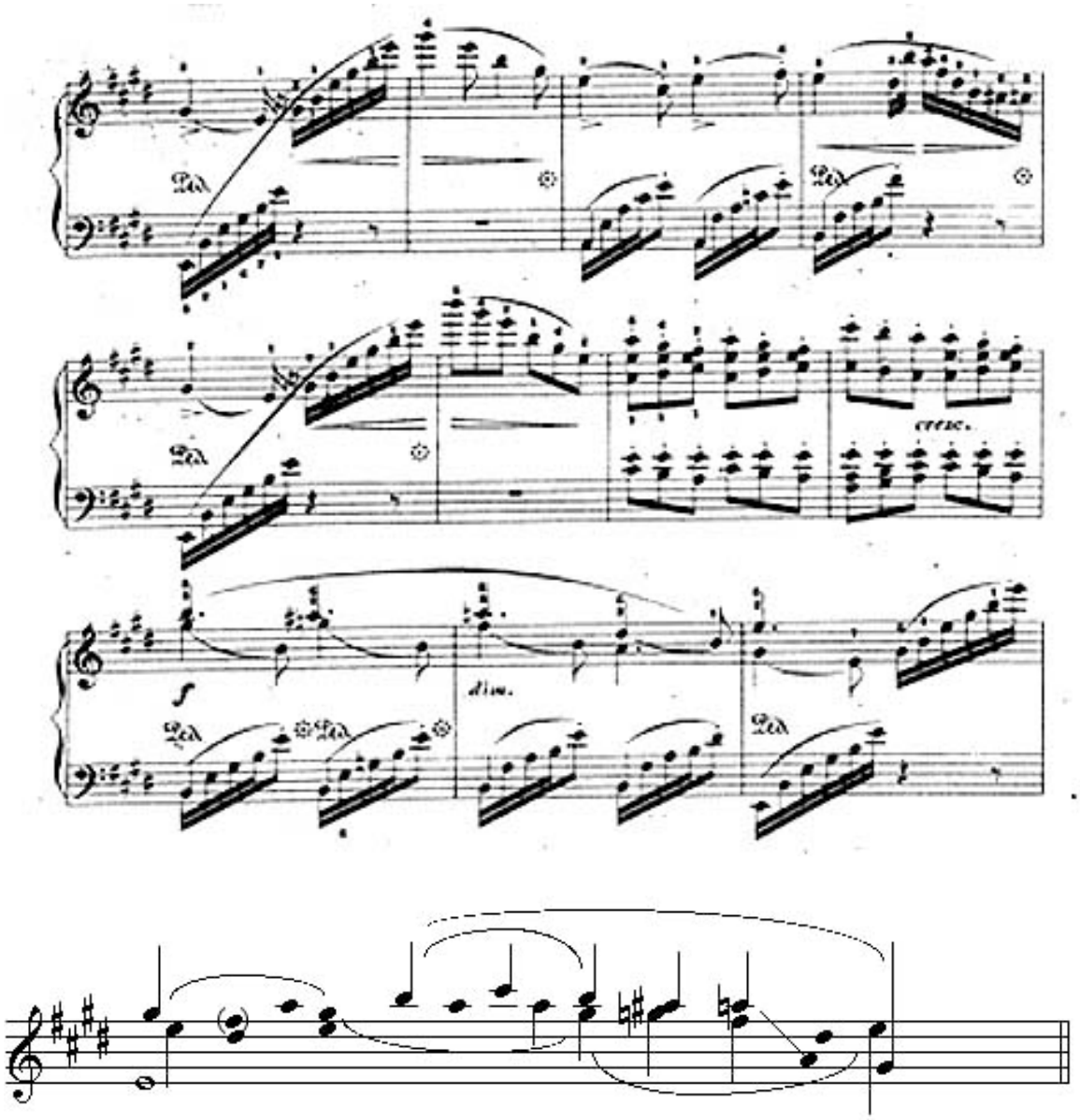
The next example is "Minden Waltz" (again from *The Souvenir*). The entire waltz has its registral complications, but the third strain, which I show in the graph, is very direct in its 5-3-4-2-(3)-1 figure.



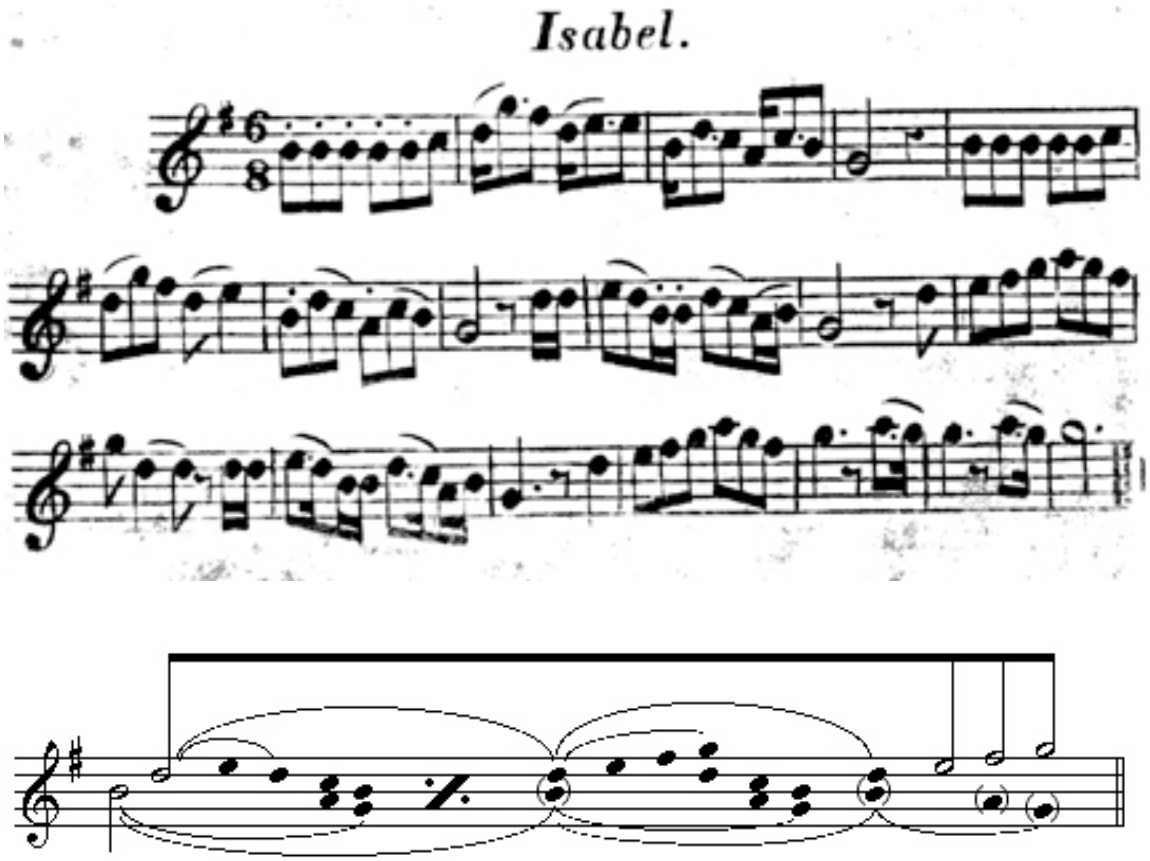
The "Tyrolese Dance" (from *The Souvenir*) reverses the complications of "Minden Waltz" -- here I have the first strain only. Note that when ^5 is balanced with ^3, the result can be a rising cadence figure, as ^5 moves upward to ^8.



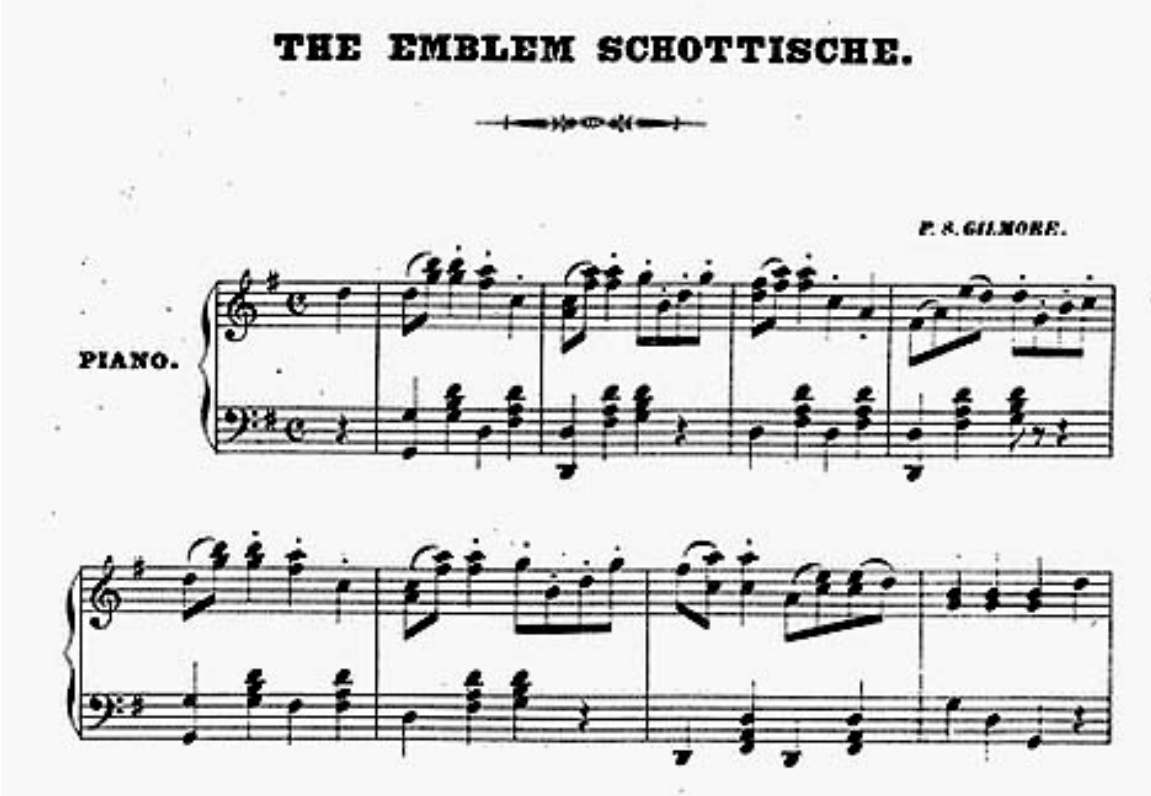
The reprise and cadence from an Albumleaf by Danish composer Neils Gade; the score is an edition published in Cleveland in 1885 and is on the American Memory site, 1870-1885 section -- search by composer or title. This piece shows a slightly more complex context and a perfect balance between ^3 and ^5.

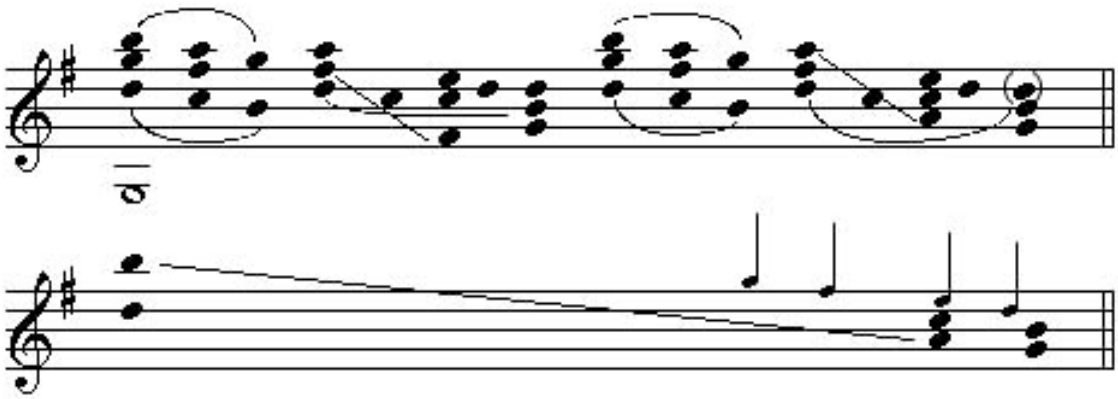


The tune "Isabel" from *The Souvenir* makes the ^3 explicit in its several repetitions of the figure and, like the Tyrolese dance, whisks ^5 off toward ^8 at the end.

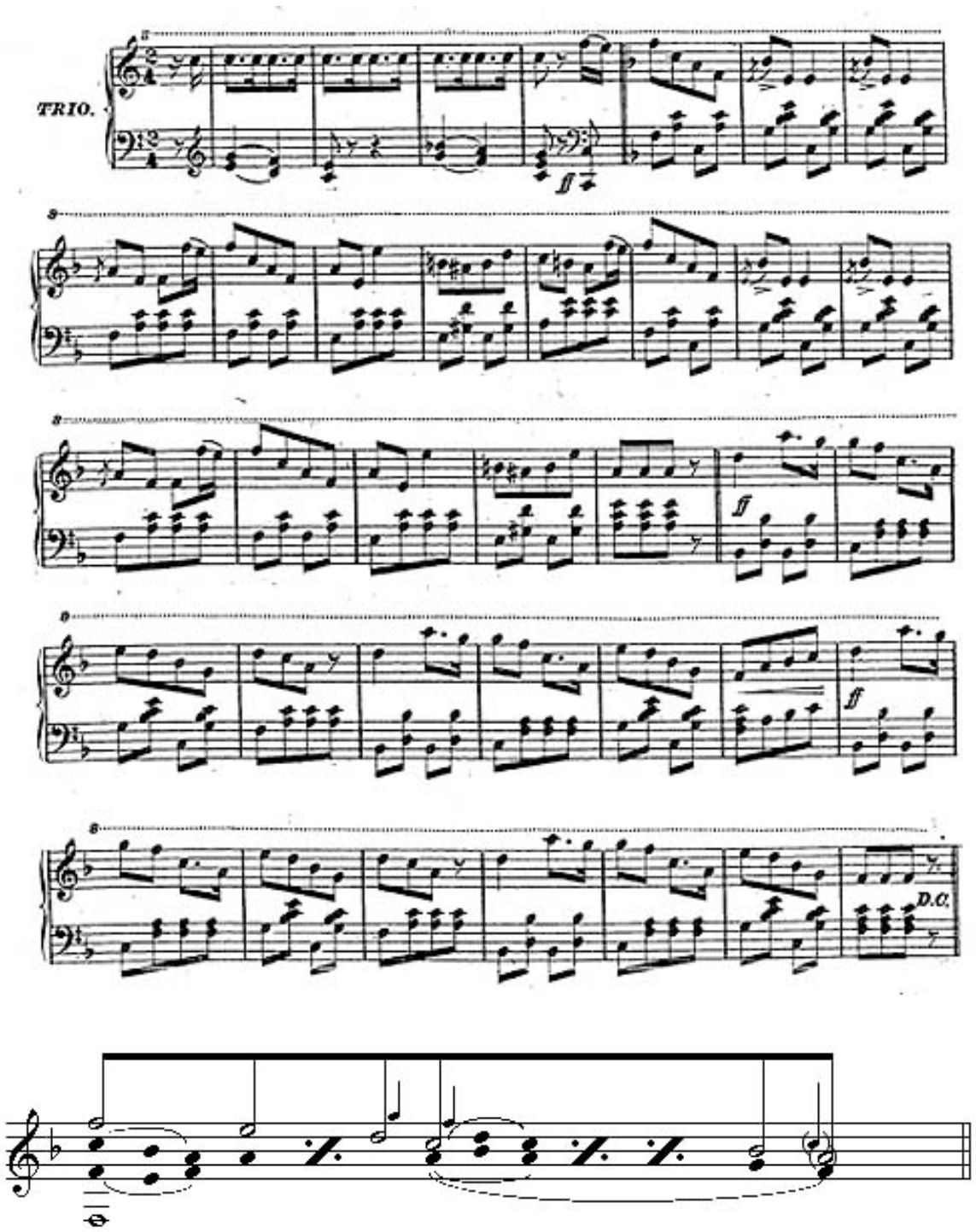


The first strain from Patrick Gilmore's "Emblem Schottisch" (on American Memory, 1820-1860 section) creates a denser texture by adding a third upper voice. Note that ^3 is explicitly stated at the end and ^5 is clearly implied (after having been heard in the parallel first phrase).





The last example is for the trio to Eduard Strauss' galop "Bahn frei" (Clear the Track!); a two-piano reduction by James Freeman is on the American Memory site (if you search for the composer, use "Edward"). This has the denser texture of Gilmore's schottisch, but a forceful linear pattern cuts through, descending from ^8 down to a (strongly) implied ^3 at the end.

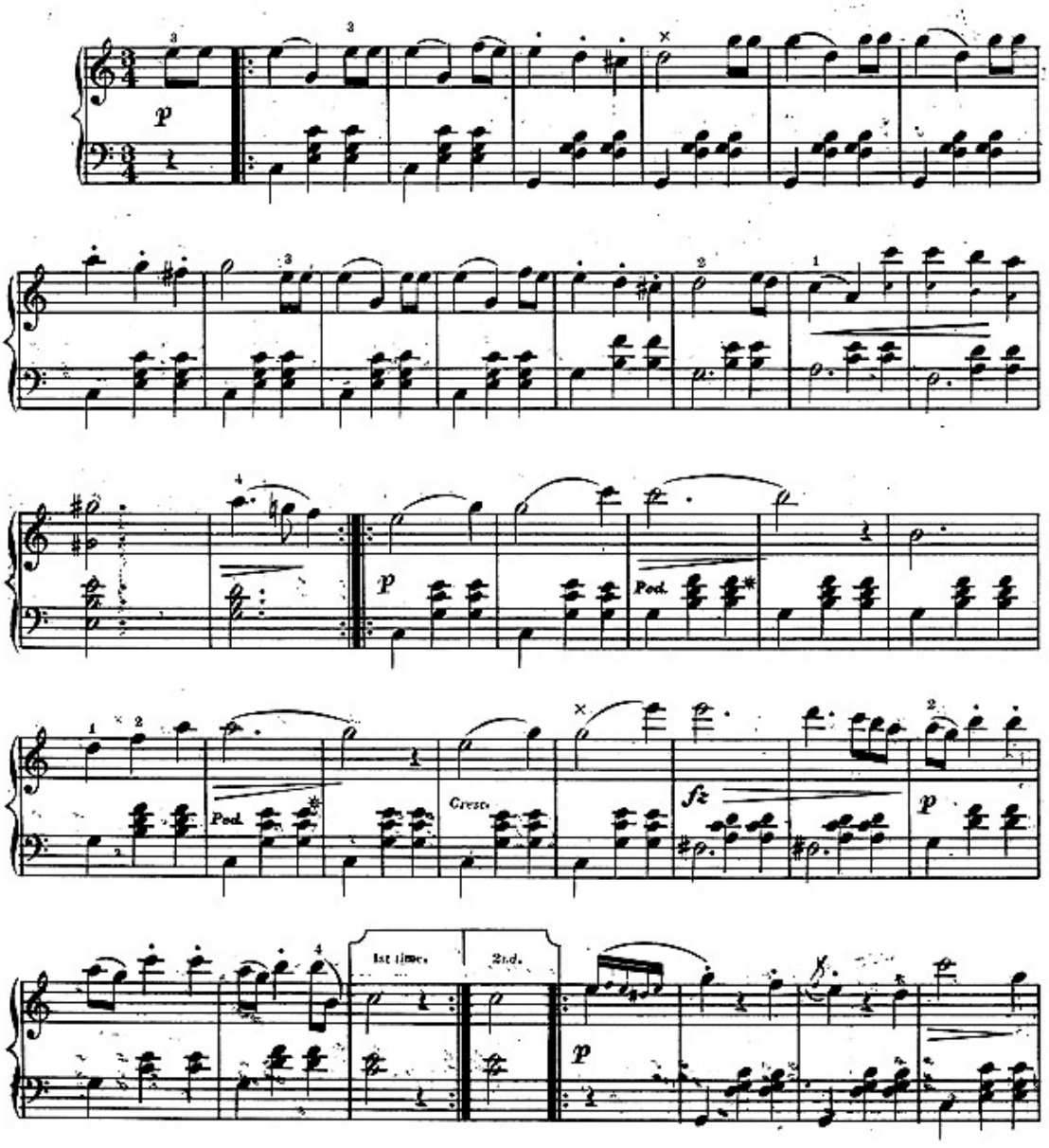


(Conclusion) As some of the examples above suggest, the 5-3-4-2-(3)-1 figure is not the only three-voice cadential gesture, but it is certainly the most characteristic one in dance and domestic musics throughout the nineteenth century. Whether this figure plays a significant role in concert musics, on the other hand, is difficult to determine. Complexities of register that arise in almost any extended composition, along with the expansion and elaboration of cadences--especially structural or closing cadences--tends to undermine the registral distinction between voices that can be easily

maintained in individual strains of dances or strophes of songs. Those same complexities, on the other hand, virtually guarantee a thicker web of underlying voice leading than a two-voice, "first species" background assumes.

COMPLEX UPPER-VOICE FIGURES IN TRADITIONAL TONAL COMPOSITIONS -- SECOND SET OF EXAMPLES: WALTZES AND POLKAS BY THE STRAUSSES

Johann Strauss, senior, published a Philomel Waltz, Op. 82, in 1835. I am not certain if this waltz is the basis of a simplified arrangement issued a few years later (1854) by William Dressler, but it seems likely. The first eight bars show a common partitioning of phrases according to scale degree -- ^3 in the first phrase, ^5 in the second. Despite this -- and a cadence that appears to rise to C6 at the end of the second strain (and therefore also the end of the waltz) -- there is never any real doubt that ^3 is the principal melodic voice and that ^5 acts in its traditional role as a cover tone (as does ^8 above ^5 in the second strain).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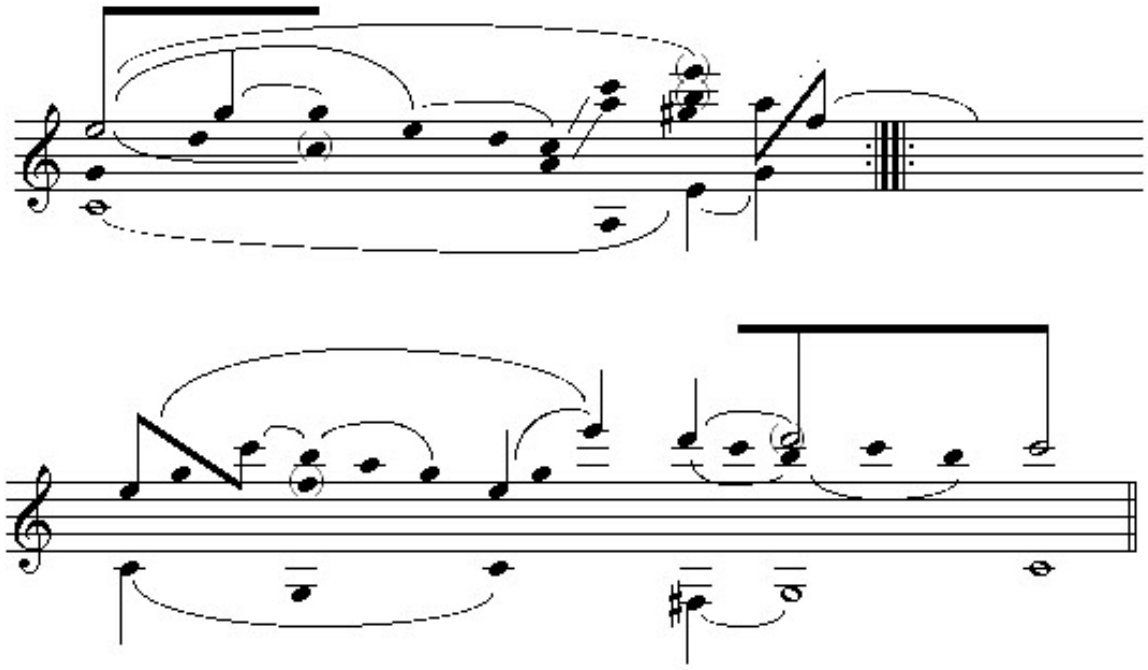
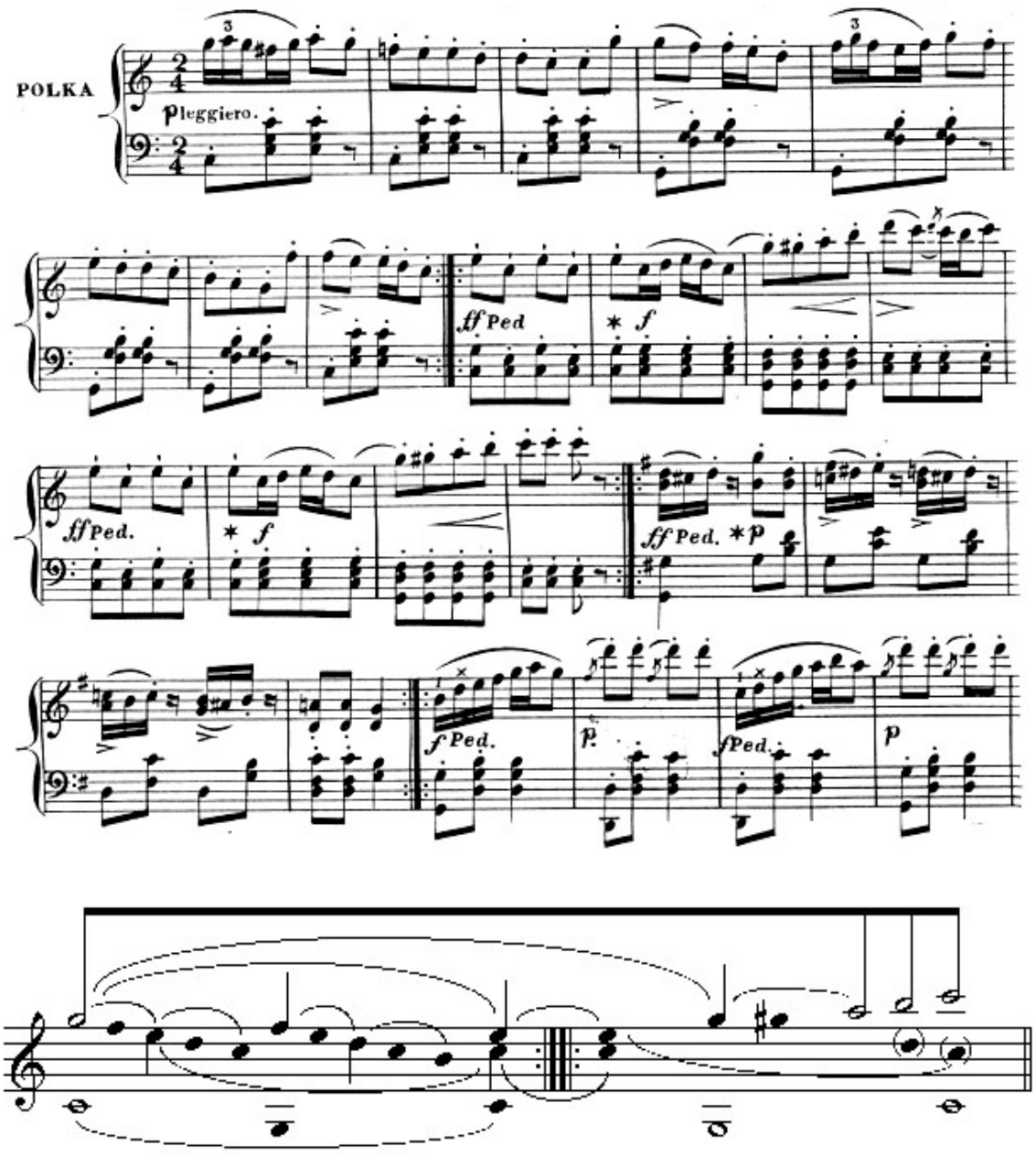
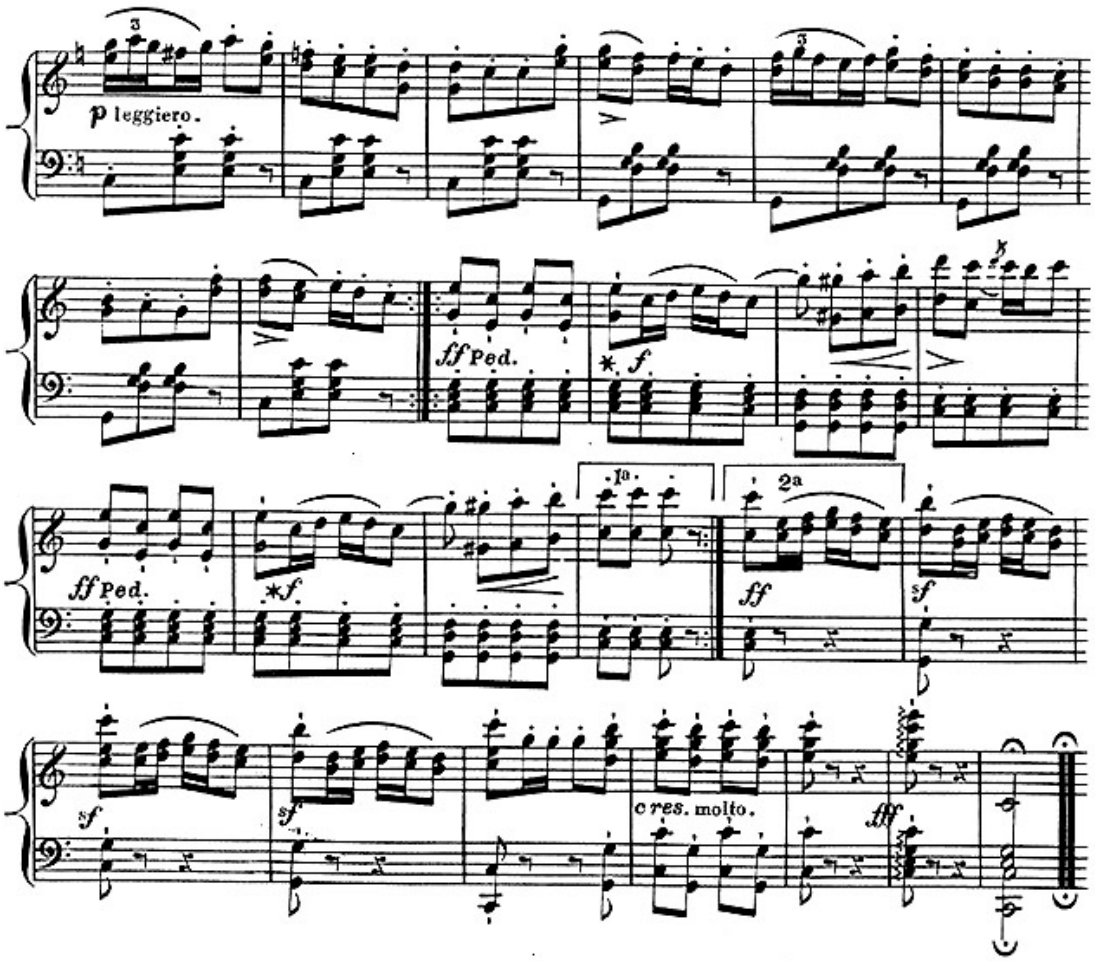


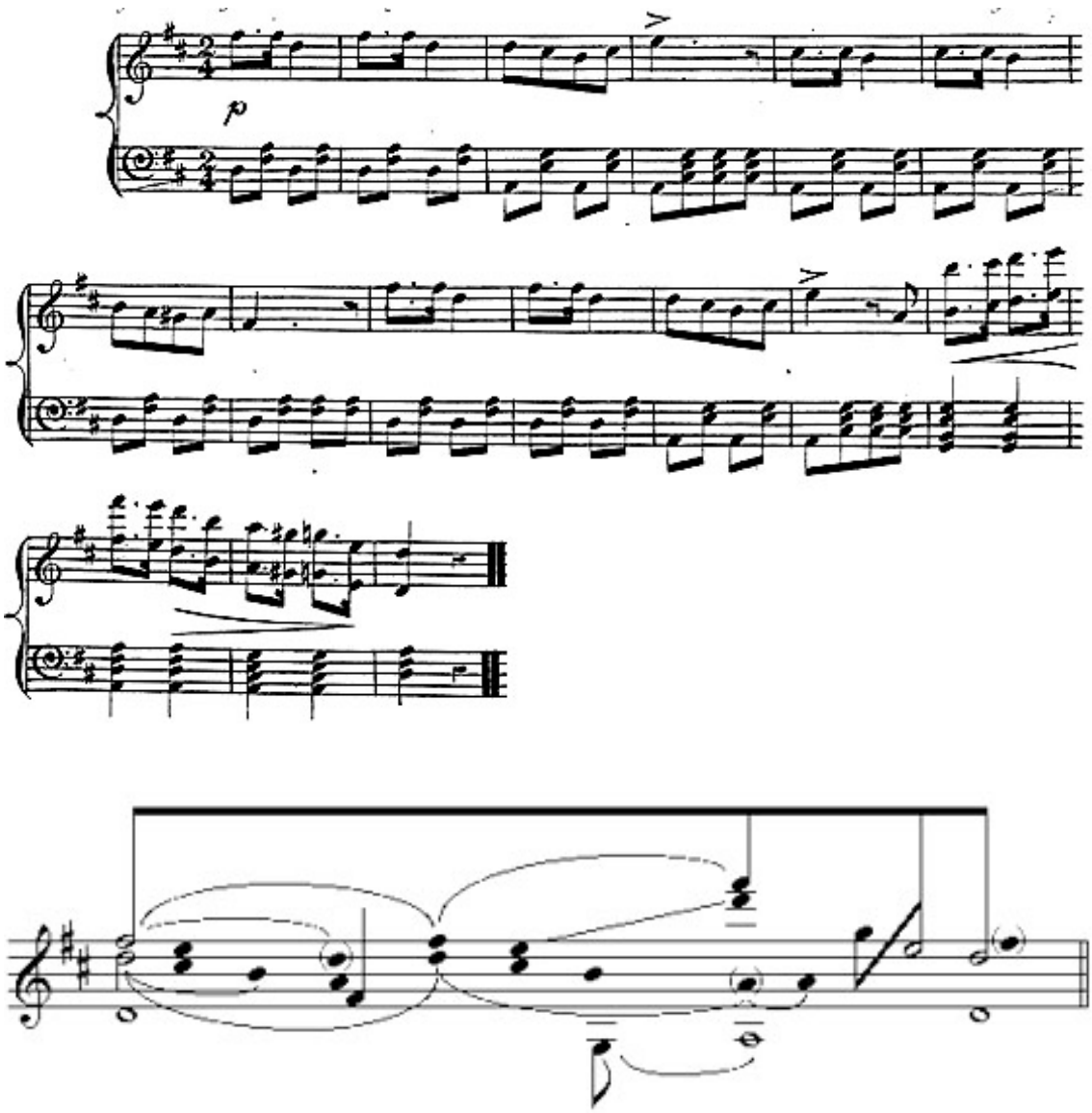
There is no Marienka polka attributed to Johann Strauss, sr., but J. C. Viereck (another prolific arranger and composer) published an arrangement under Strauss's name in 1850 (in Philadelphia). In the first strain, lines move directly through fifths, but a single middleground figure moves by step from ^5 to ^3, leaving the end open on ^3. The pairing ^1-^3 continues directly into the second strain, but ^5 reappears and quickly pulls the line up to ^8, with the help of a chromatic passing tone (G#).



In the reprise (after a trio of two strains in G major), inner voices are made explicit but the interesting feature is the old-fashioned high-register coda (at the second ending) that merely repeats the ^7 and ^8 of the ascending structural cadence.

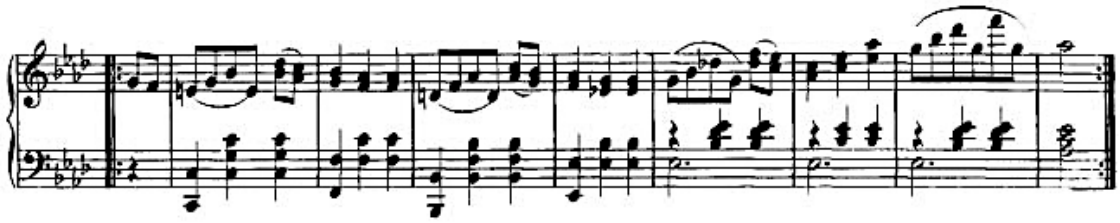


The Seraphine gallopade, like the Marienka polka, is not listed in Strauss's works but is attributed to him in an arrangement also published in Philadelphia (in 1845) and advertised "as performed at Madame Mallet's Soirées." The end of the first strain exhibits a common "open" figure that sharply defines the third ^4 and ^2 over V (in the penultimate bar) but then resolves only the ^2 to ^1, leaving the ^3 "open" to repetition, continuation, or ultimately a sense of the piece as a fragment (or as free of overdetermined closure). Otherwise, a clear pattern of descending lines prevents any ambiguity about voice-leading.

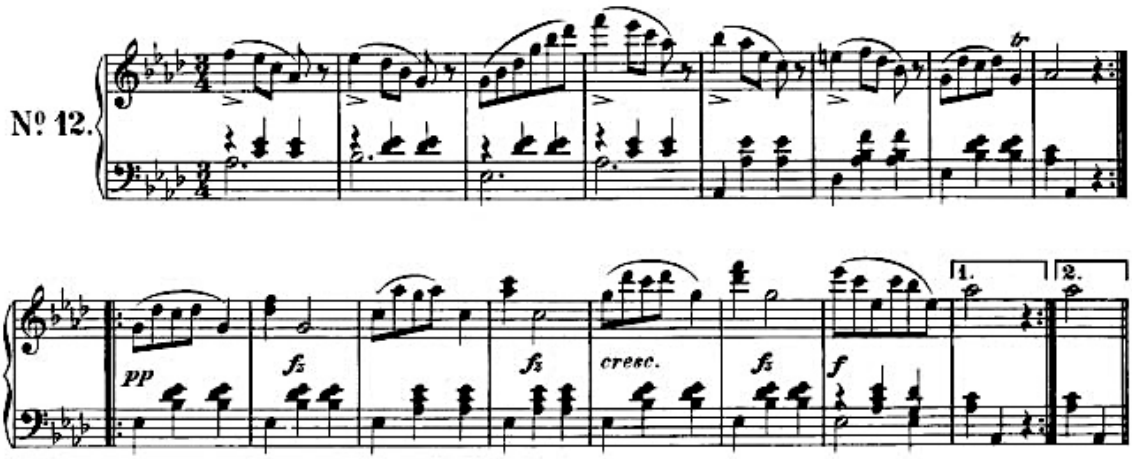


COMMENTARY, WITH SCORE EXAMPLES, FOR A PERSISTENT ^5 IN EARLY WALTZES

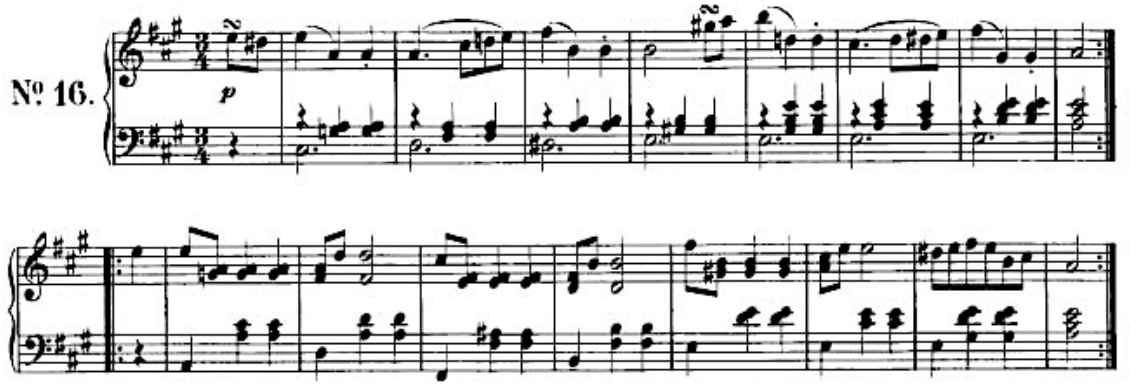
The second strain of Schubert, Opus 9 [D.365], no. 3 is a simple example. The ^6 as a ninth over V is left hanging in a prominent place on the final beat of the seventh bar, leaving a strong implication of ^5 over the final tonic. The cadence of the first strain is identical. Despite the two cadences ^5 does not attain the design status it might because it plays no role before the cadences. (For more on ^6, see the next section of this document.)



The twelfth waltz in D. 365 reverses the situation -- ^6 is certainly prominent throughout but in the cadence of the second strain it is hard to tell if the ^5 persists over the tonic or if the voice has dissipated in that register because of an implied ^4 and ^3 (these notes are literally present in the thumb notes of the left hand, mm. 15-16).

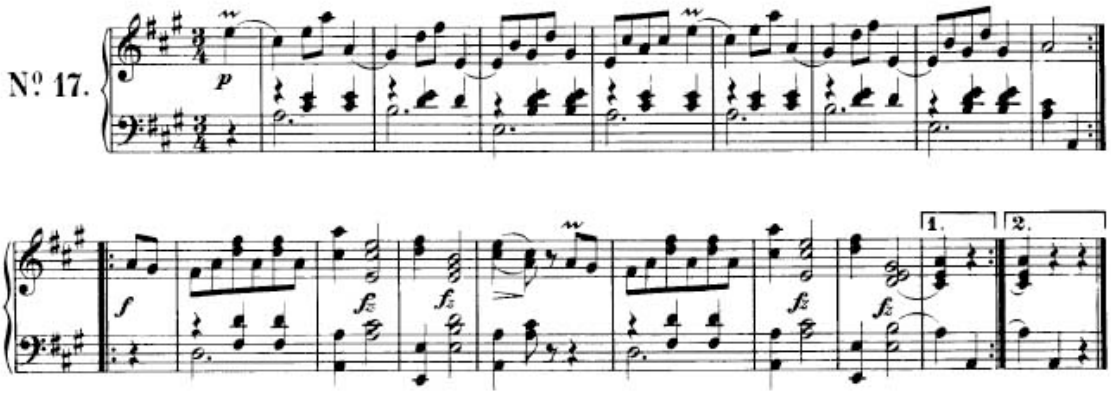


The sixteenth waltz in D. 365, on the other hand, is very direct in the cadences of both strains -- the implied ^5 is easy to hear.

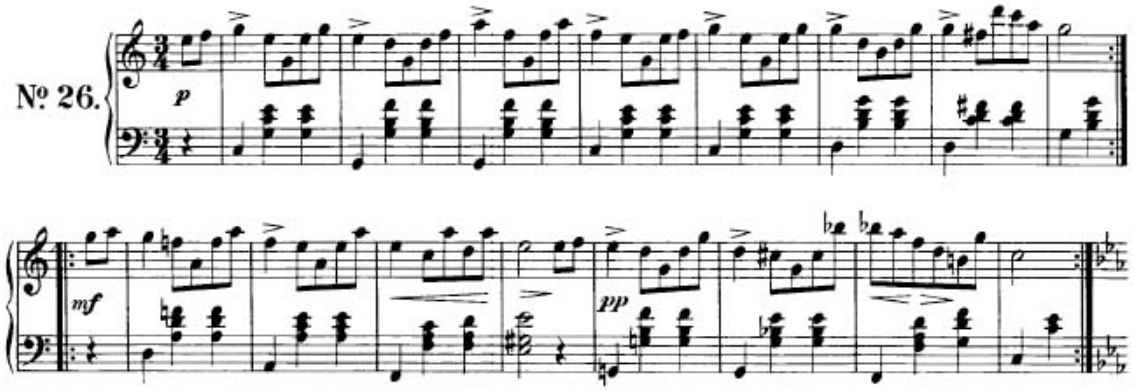


The seventeenth waltz in D. 365 plays heavily with ^7-^1, ^4-^3, and ^6-^5 in the first strain, but ^5 dissipates under the strong diminished fifth in the cadence (where an obvious implied ^3 would sit over the tonic). In the second strain, however, ^6-^5

takes over, first in consonant form over IV-I harmonies (mm. 9-10) then over the dissonant V9. Note that ^5 is literally sounded after ^6 (mm. 11-12), setting up the parallel place in the cadence (mm. 15-16).



In the *Valses sentimentales* (D. 779), number 26 is one of those waltzes that balances an equally weighted ^3 and ^5. Because of that context, the ^5 (G5) on the last eighth of m.15 is more readily heard as persisting over the following tonic.

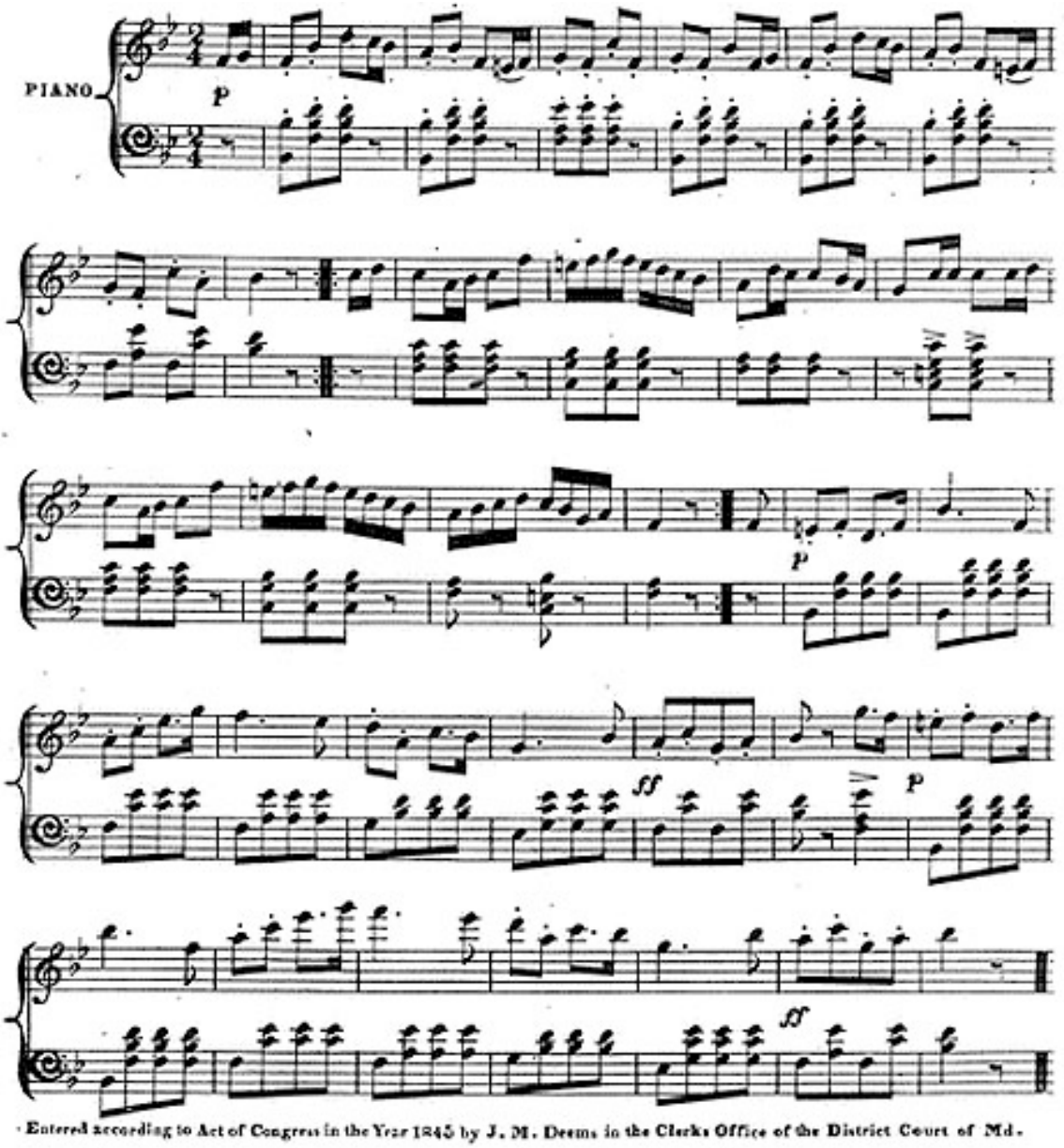


ON ^6 AND V9 IN EARLY POLKAS

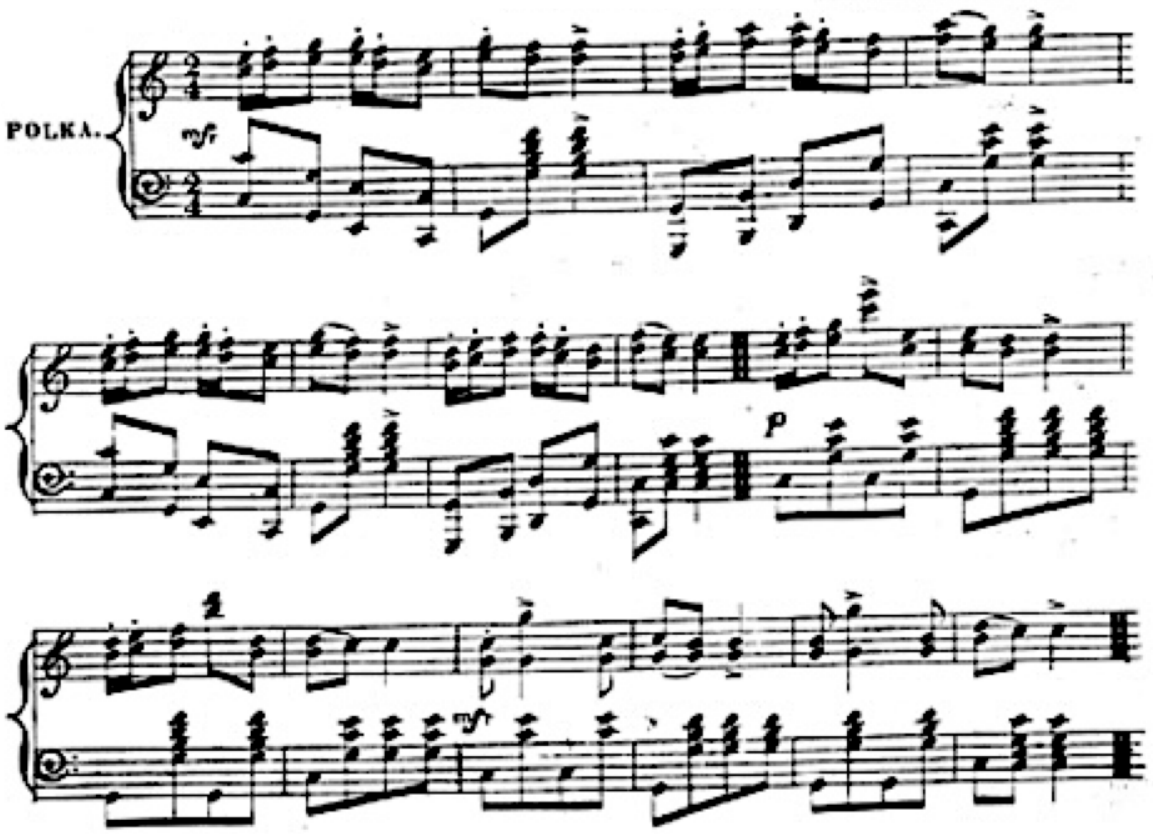
Within a few decades during the first half of the nineteenth century, conventions established by repetition in many dance compositions (and of course reinforced through their performance) produced a surprisingly complex treatment of scale degree ^6, in particular. These changes began in the waltz repertoire as early as the 1790s and accelerated rapidly in the 1820s; but they became especially pronounced in the polka, which appeared in Prague in 1837, in Vienna and Paris by about 1840, and thereafter became very popular almost overnight in Europe and the United States. The supplemental examples here show the status of ^6 in a number of early polkas; scores for these pieces (all published in the year 1845) are reproduced on the Library of Congress American Memory site: Music for the Nation, 1820-1860. [please note: the links in this section are live. They will take you to the LOC website.]

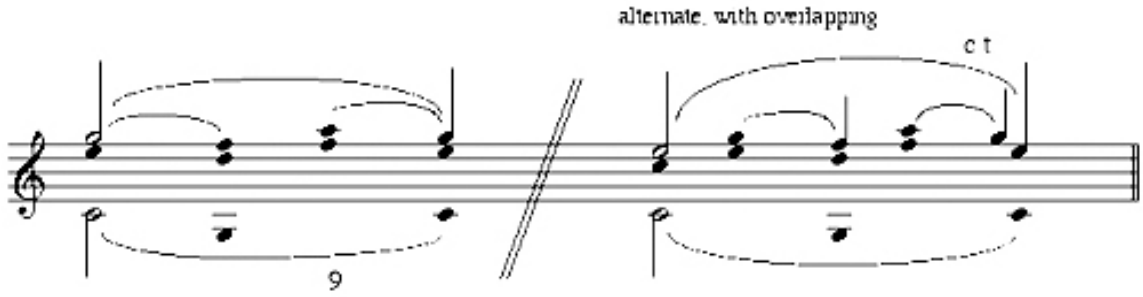
The image below is the cover from an early polka: The New York polka by B. H. R. (New York: J. F. Atwill, 1844). The dancers are in side-by-side position doing a toe-forward step (which survives in most versions of the modern polka only as part of an initiating figure). Note the woman's left arm resting on the man's right shoulder. The entire cover may be seen at New York Polka title page. This publication can also be found on the Levy Collection pages: New York Polkas.

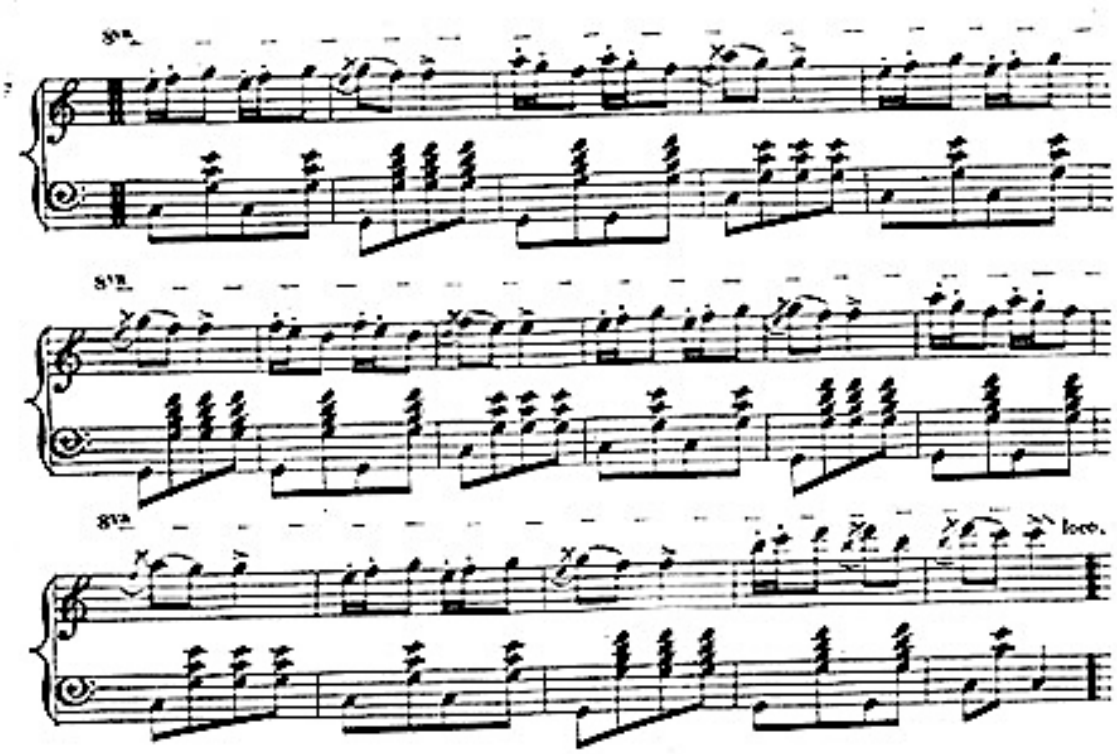
The Tarand Polka by James Deems was self-published in Baltimore. It is a single-page dance in two strains, the first of which shows plainly the traditional treatment of ^6. In bars 3-4, note the successive statements of ^6-^5 over the dominant, then over the tonic -- in the first instance, G is a fleeting ninth over the dominant, in the second a fleeting added sixth over the tonic. In the second strain, D (^6 of F major) is a simple neighbor note in the pickup, a fleeting add6 two bars later, and a ninth (?) over V moving directly to ^5-over-I immediately thereafter. It is the expansion of gestures like this last that finally ensconce the dominant ninth chord in practice.



The Gabriella Polka shows very strong 5-3 pairing. A literal adherence to voice-leading rules in bars 3-4 barely conceals a "true" ninth (see the first graph below the score; an alternate but not very satisfactory explanation at the right side of the graph uses overlapping or "reaching-over"). This polka consists of three sections, each with two strains (the entire first section is shown in the score below). However, the usual trio (B section) is replaced by a simple variation of the two strains in the A section. In the variation of the second strain, the tug upward resulting from the attention given ^5 and ^6 results in a rising cadence (though one with a primitive 5-7-8 shape -- see the second graph below the score).



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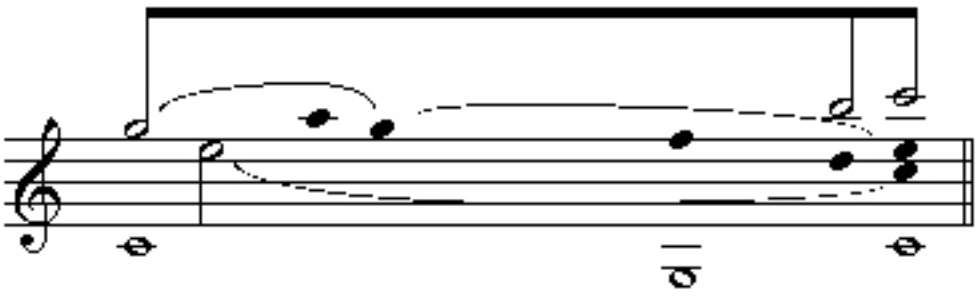
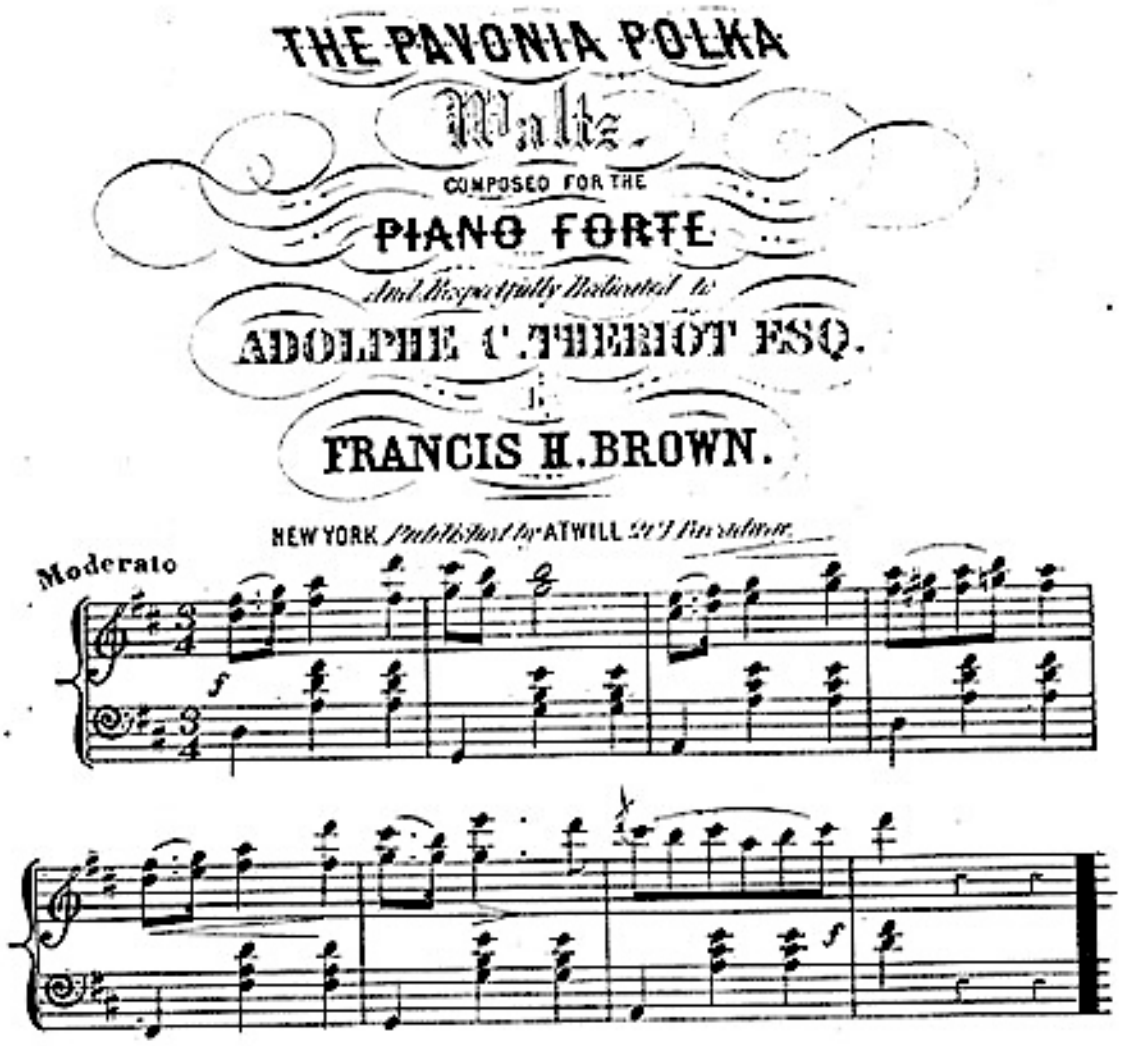
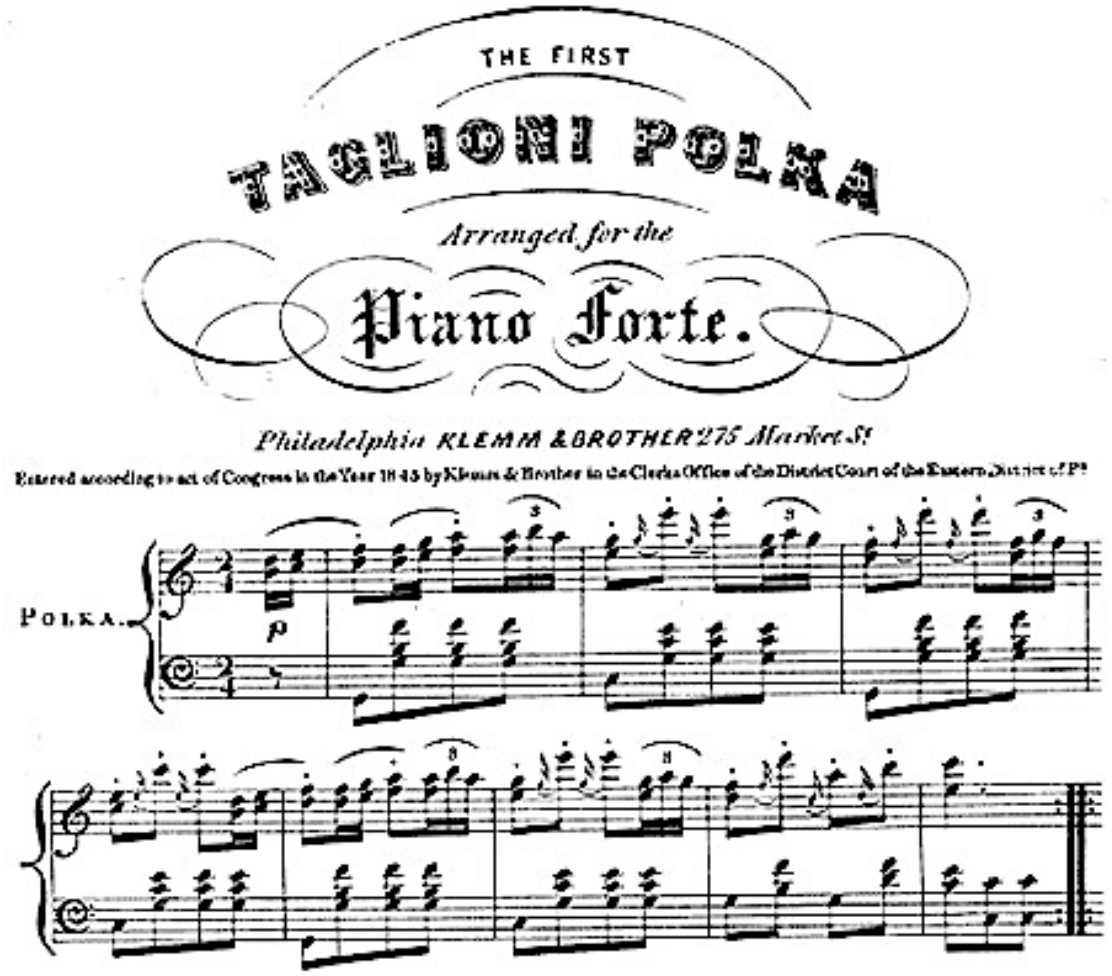


The Pavonia Polka is actually a polka-mazurka, a hybrid type (as the name suggests) whose music can be a mazurka with steady waltz-style accompaniment or a waltz with interjected mazurka rhythms (like the dotted figure that begins this piece) and sometimes also second or third-beat accents. (The polka element is in the dance, not the music -- the characteristic polka hop that occurs on or before the third beat, according to most accounts of the dance: for one such description, see Ferrero dance manual.) The Pavonia Polka goes one step further than the Gabriella Polka in bars 3-4 with a direct resolution of V9 to I. Note another rising-line cadence (A5 - B5 - C#6 - D6 in bars 5-8).



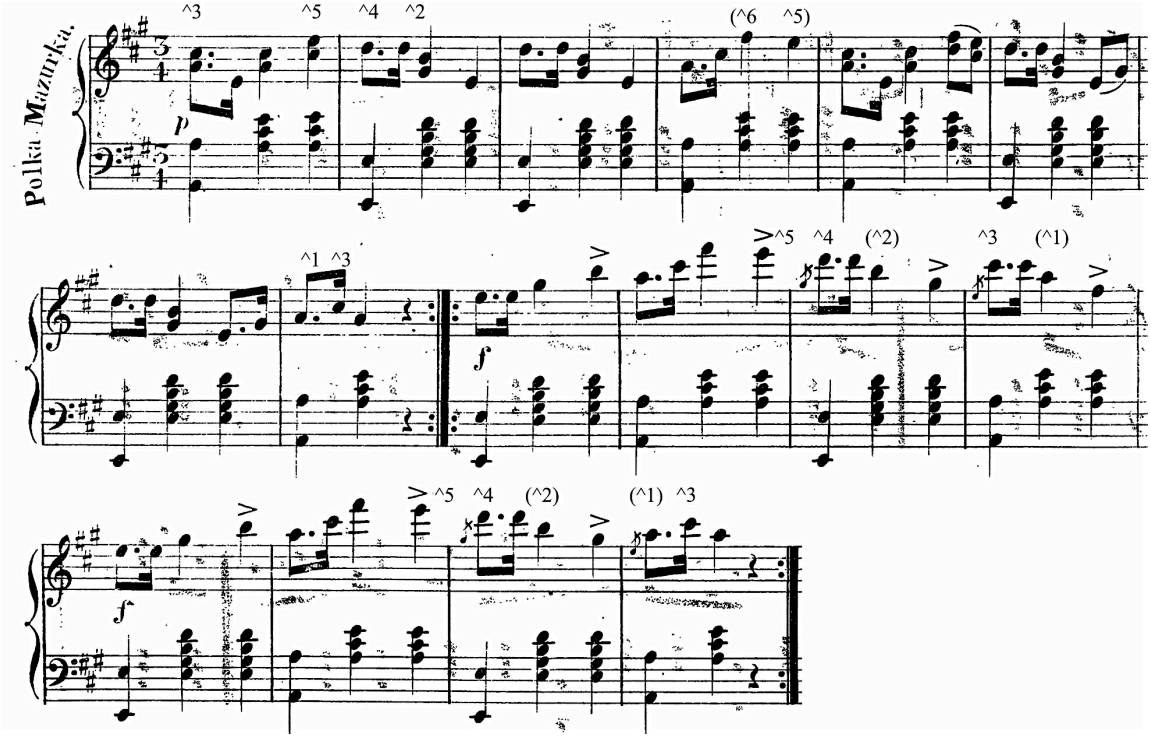
The first Taglioni Polka is very similar: note the direct resolution of V9 to I in bars 1-2 and the rising gestures in the cadence. In this instance, however, the overall linear progression is governed by the upper ^3, not by the rising gesture (see the graph under the score).



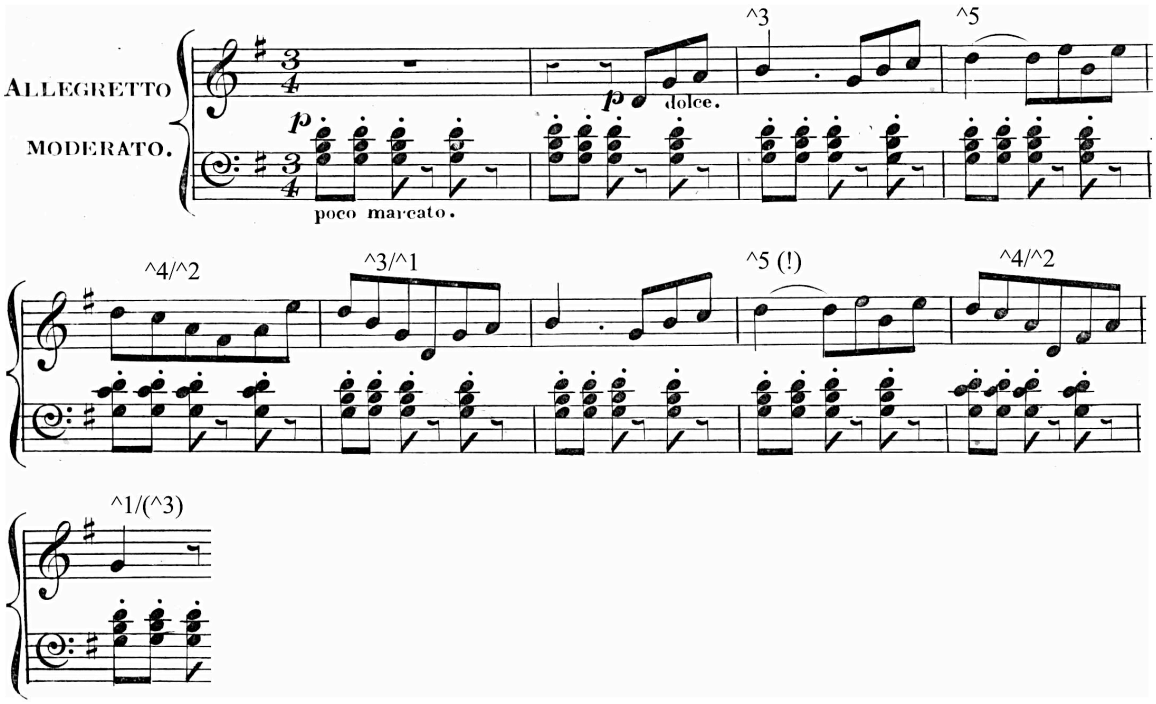
ADDITIONAL EXAMPLES OF THE ^5-^3 PAIRING

MARCH 2014

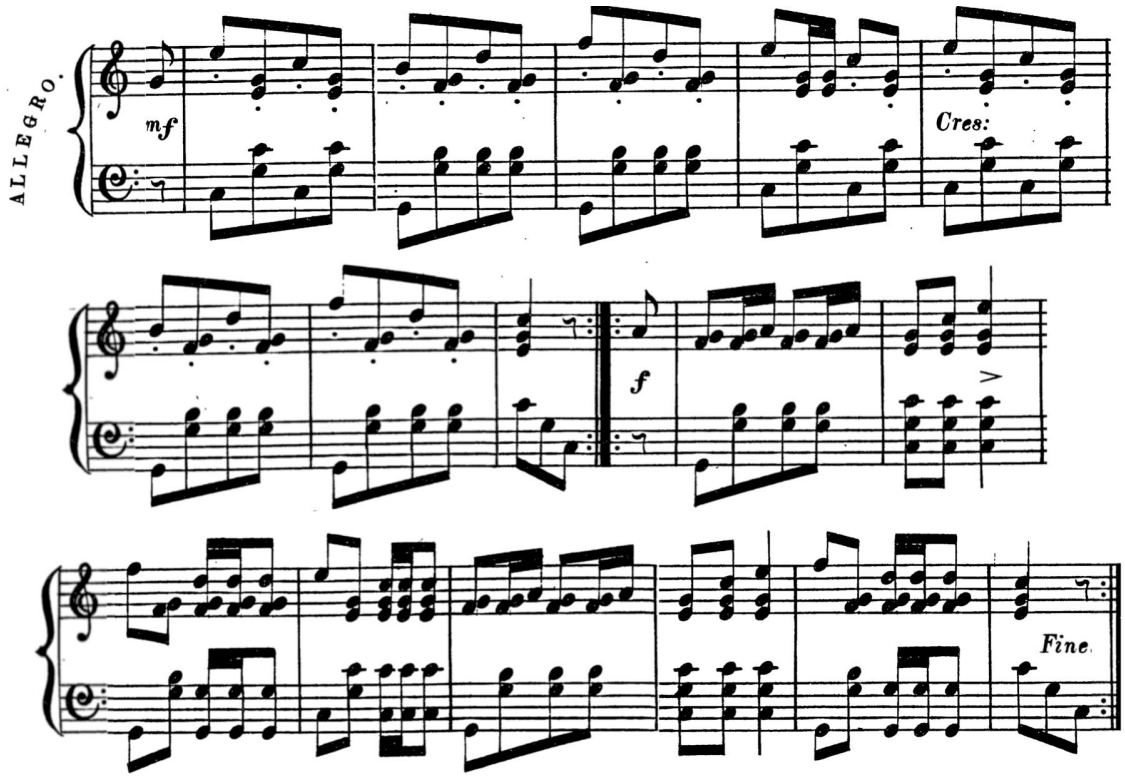
The *Free Land Polka Mazurka* was self-published by George Funk in 1857. (Score on the American Memory site.) The first strain is a very clear example of the ^5/^3 - ^4/^2 - ^3/^1 figure with a ^6 - ^5 covering ornament. The second strain is a bit less clear as the initial ^3 under ^5 is not emphasized (it's a sixteenth note), ^5 is quite strong, and the effect of the cadence is to highlight the line ^5 - ^4 - ^3 rather than the third intervals.



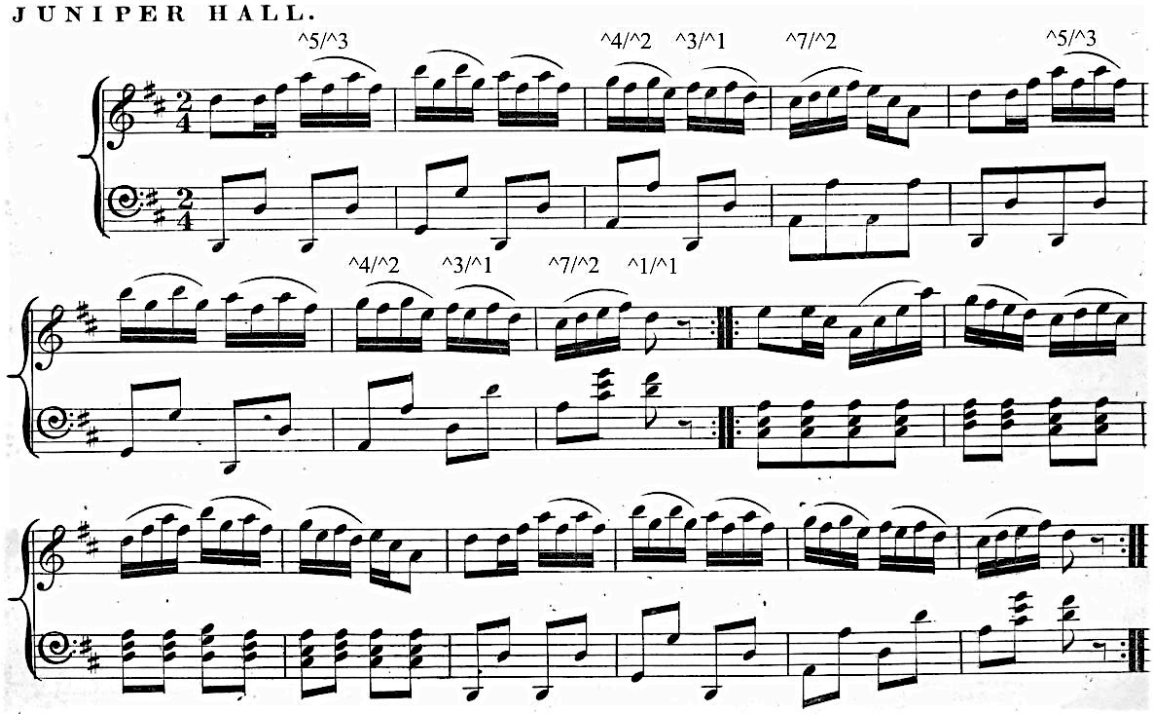
Rossini-Herz, *The Celebrated Tyrolian Waltz . . . introduced in Cenerentola, adapted to the piano forte by Henri Herz*. From the 19th century sheet music collection (University of North Carolina at Chapel Hill). I could not find this waltz in Rossini's opera. The waltz aria in Act II, Don Ramiro's "Dolce speranza," is a different piece. In any case, this melody is a very clear instance of the suppressed but "audible" ^3 over the closing tonic. The essential melodic shape of each phrase is the ^5/^3 - ^4/^2 - ^3/^1 figure. Curiously, Rossini (?) alters the line but closely reproduces the figure in the second phrase.

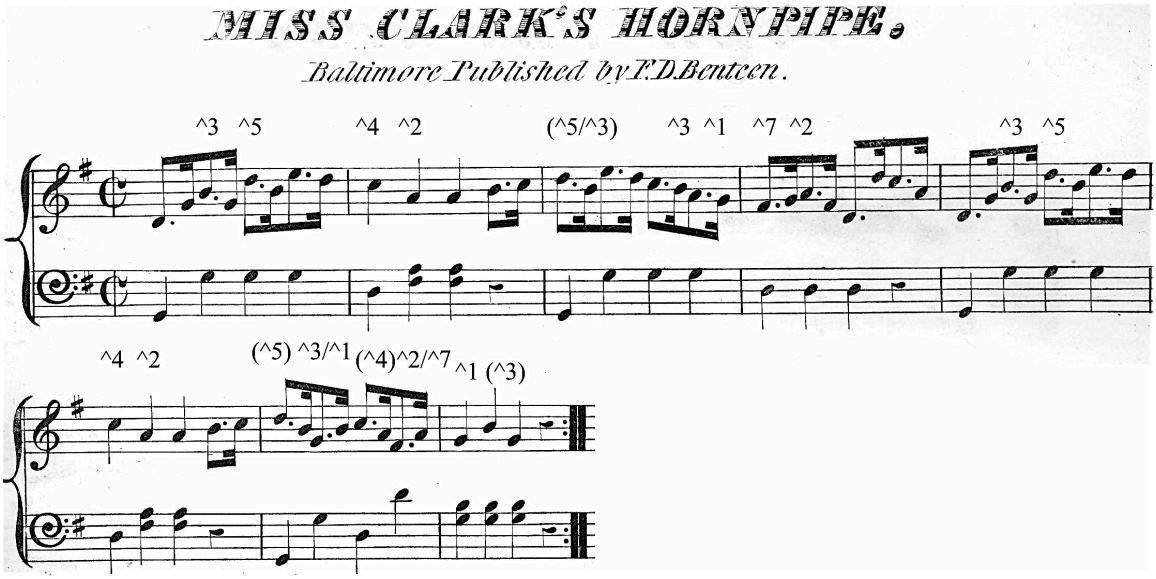


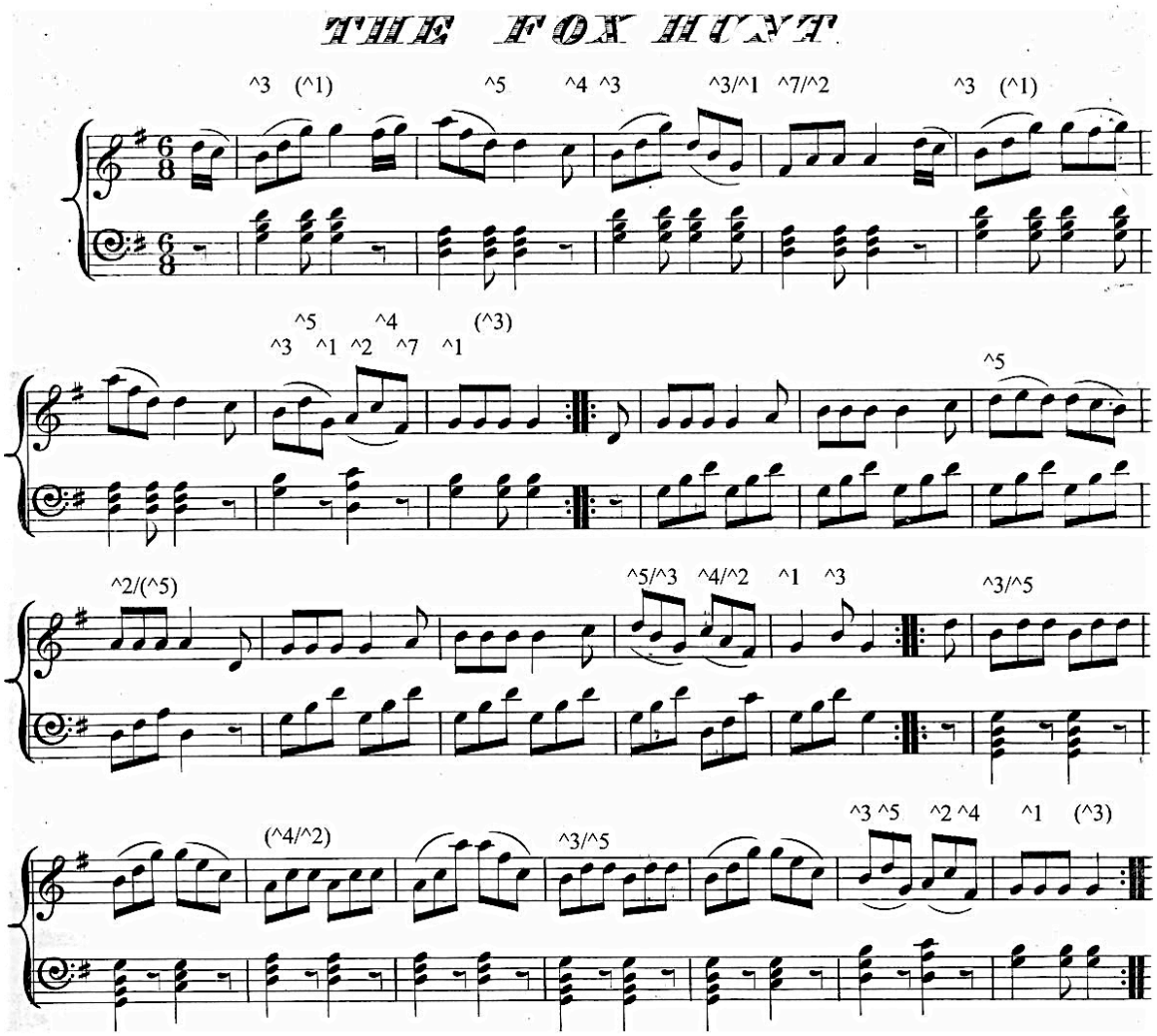
Strauss, sr. (attributed), *Ostrich Feather Quick Step*, arr. By Edward L. White. (Boston: Ditson, 1847). The figure is ^3/^1 - ^4/^2 - ^3/^1 repeated. The final ^3 in both strains is not really suppressed -- instead, it is moved down an octave.



Three pieces from *Virginia Reels, A Collection of the Most Admired Reels, Dances &c. Selected & Arranged for the Piano Forte. No. 3*. Published in Baltimore by F. D. Benteen (before 1820?). *Juniper Hall* has the simplest design of the three: ZZ *Miss Clarke's Hornpipe* is more complex in that it layers ZZ. Finally, *The Fox Hunt*'s three strains



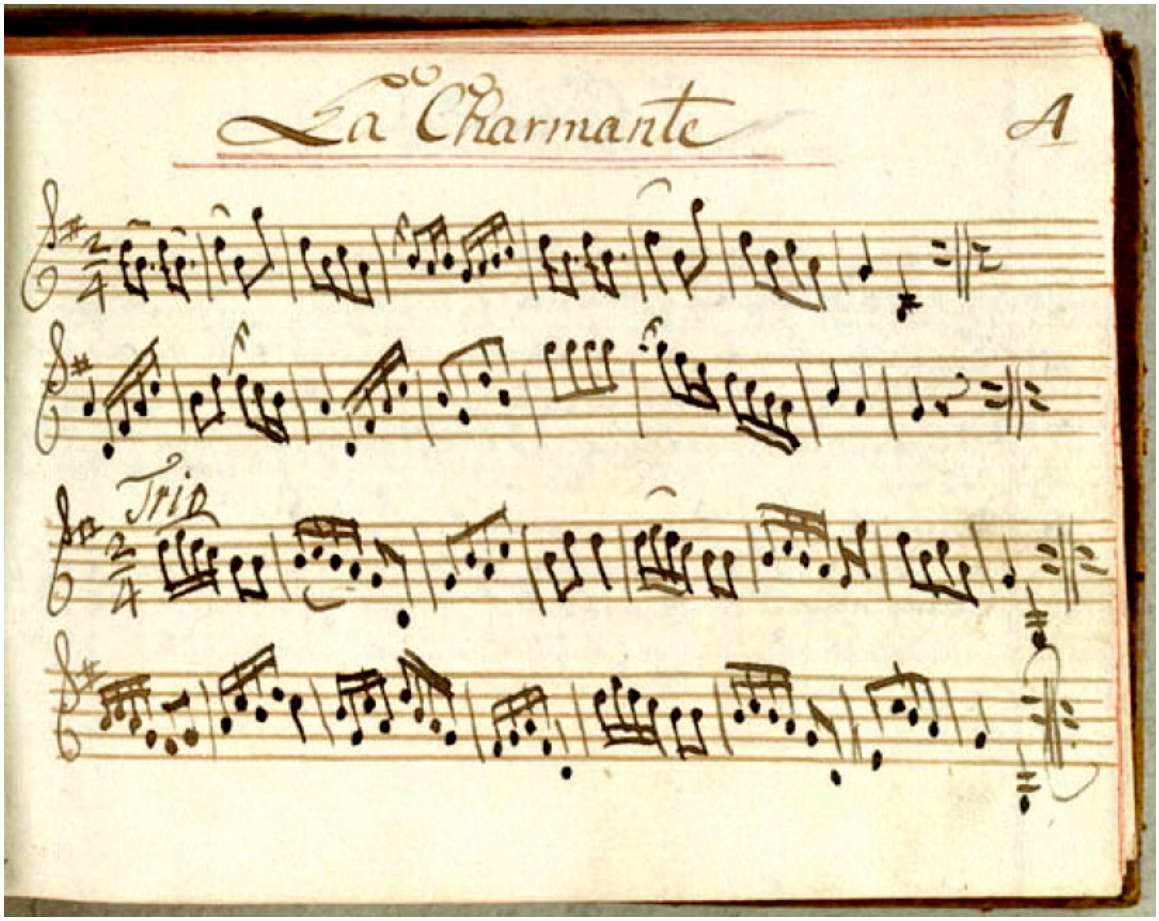


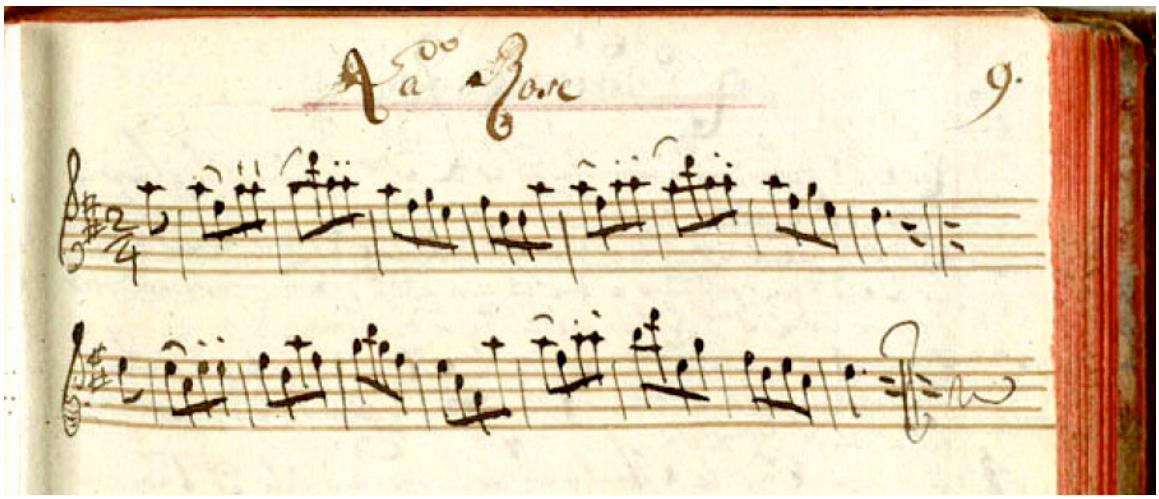


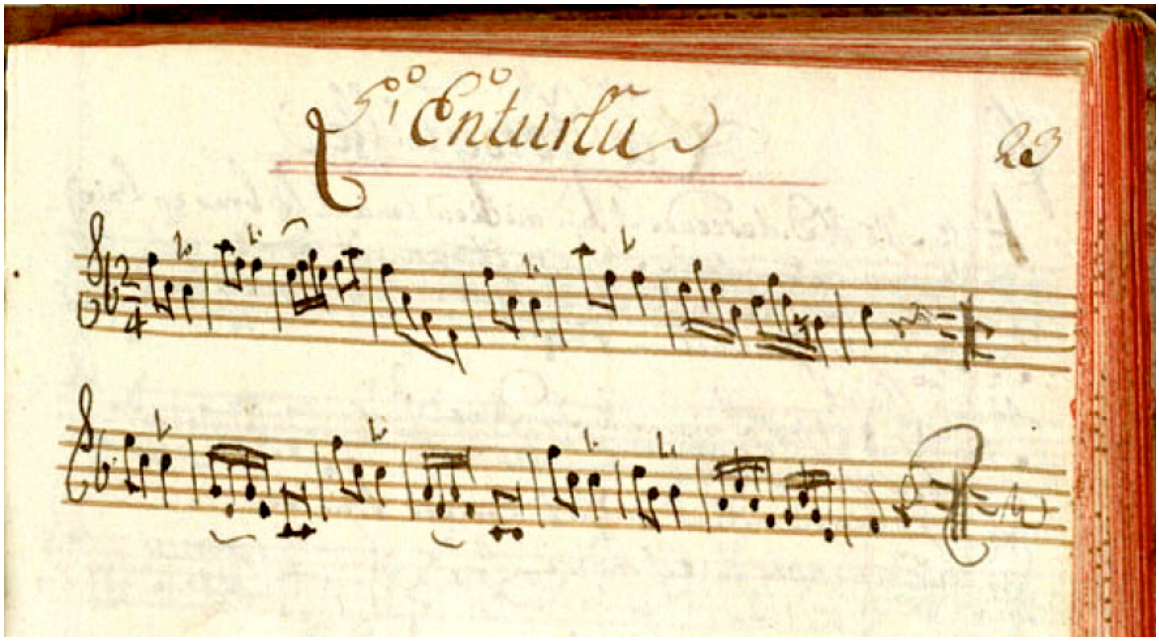
Nine contredanses from the ms. compilations of Johan Bülow (scanned from the collection of Det Konigele Bibl., Copenhagen). These may well have been done under Bülow's supervision or at his request but are certainly not by him: he was a high-ranking official at the Danish Court.

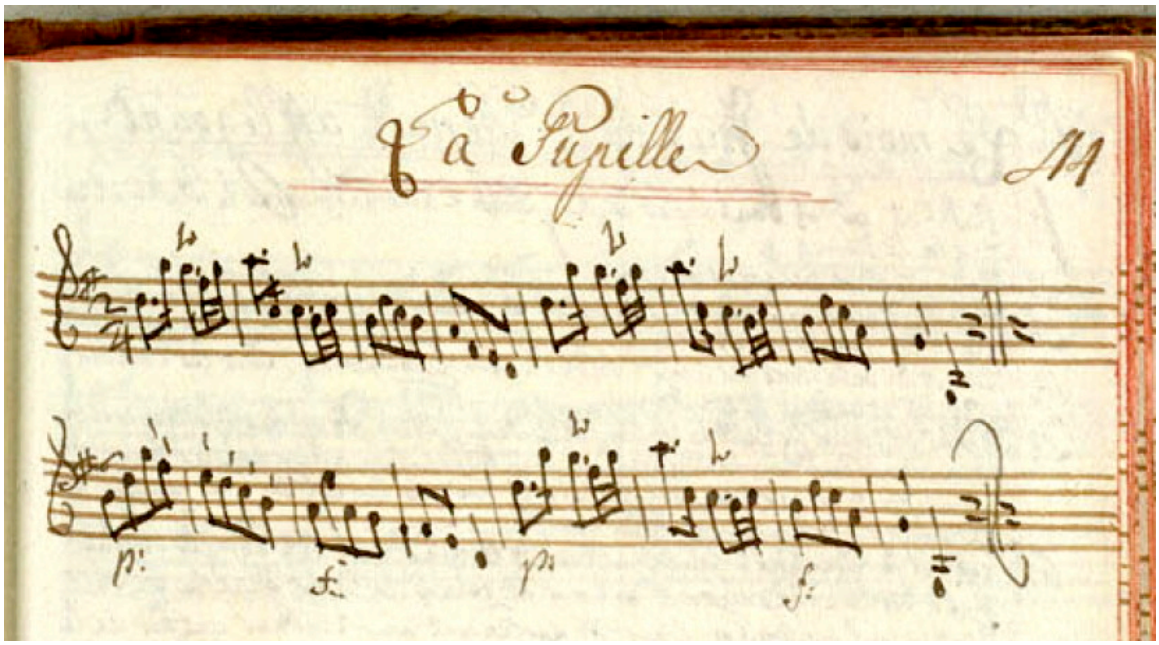
1-4: from the 1773-74 set. *La Charmante*: the first strain is plainly the ^5/^3 - ^4/^2 - ^3/^1 figure with a suppressed but "audible" ^3 at the end. So is the first strain of the Trio. *La Rose*: ditto for the first strain; the second finishes the figure with ^2/^7 -- ^1. *L'Enturlu*: The second strain has the the ^5/^3 - ^4/^2 - ^3/^1 figure with a suppressed but "audible" ^3. So does the first strain but with the added gambit of a modulation to the dominant: begins with F: ^1/^3 but ends with C: ^5/^3 - ^4/^2 - ^1/(^3). *La Pupille* is a counter-example of sorts: although both strains suggest the suppressed ^3 in their cadences, ^3 has been so strongly emphasized earlier that a line can be easily heard as ^3-^2-^1 with no significant residual ^3.

Complex upper-voice figures, p. 31

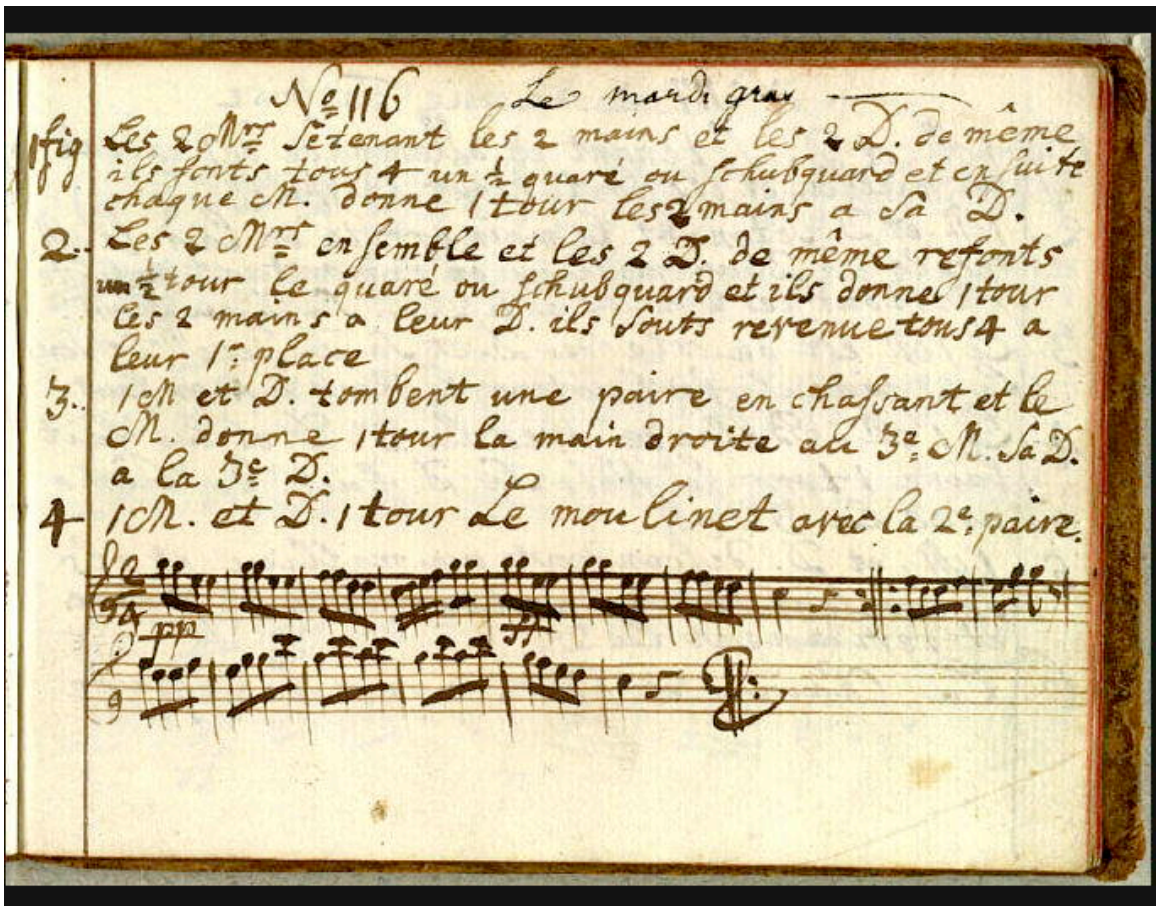




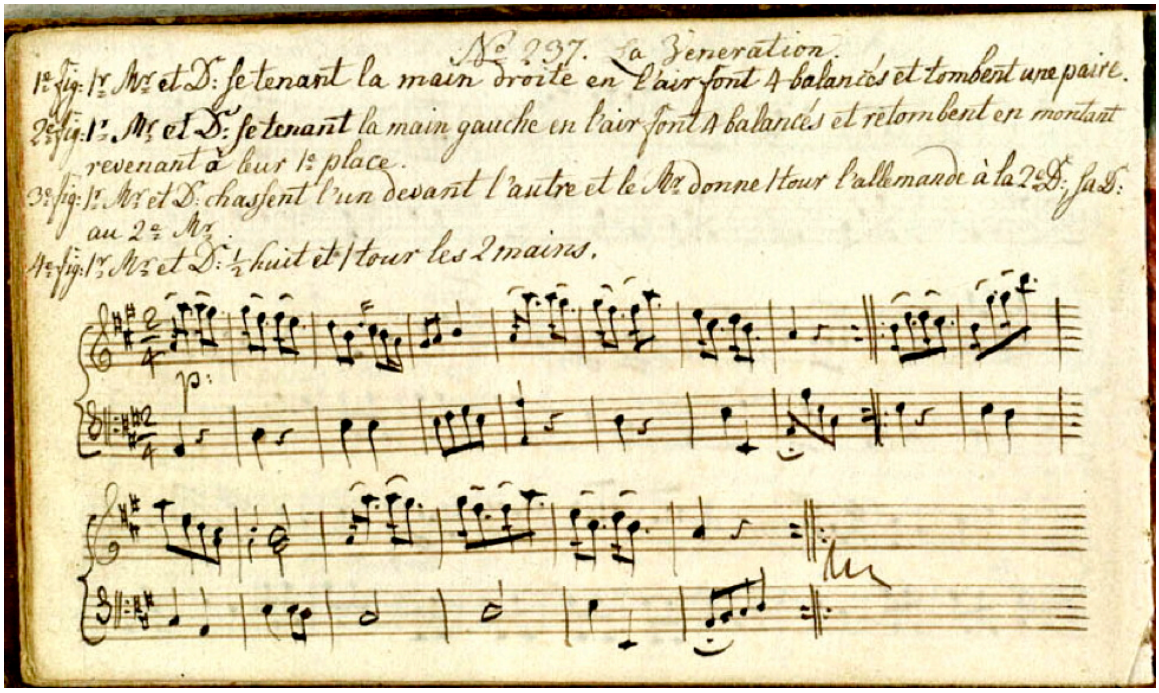


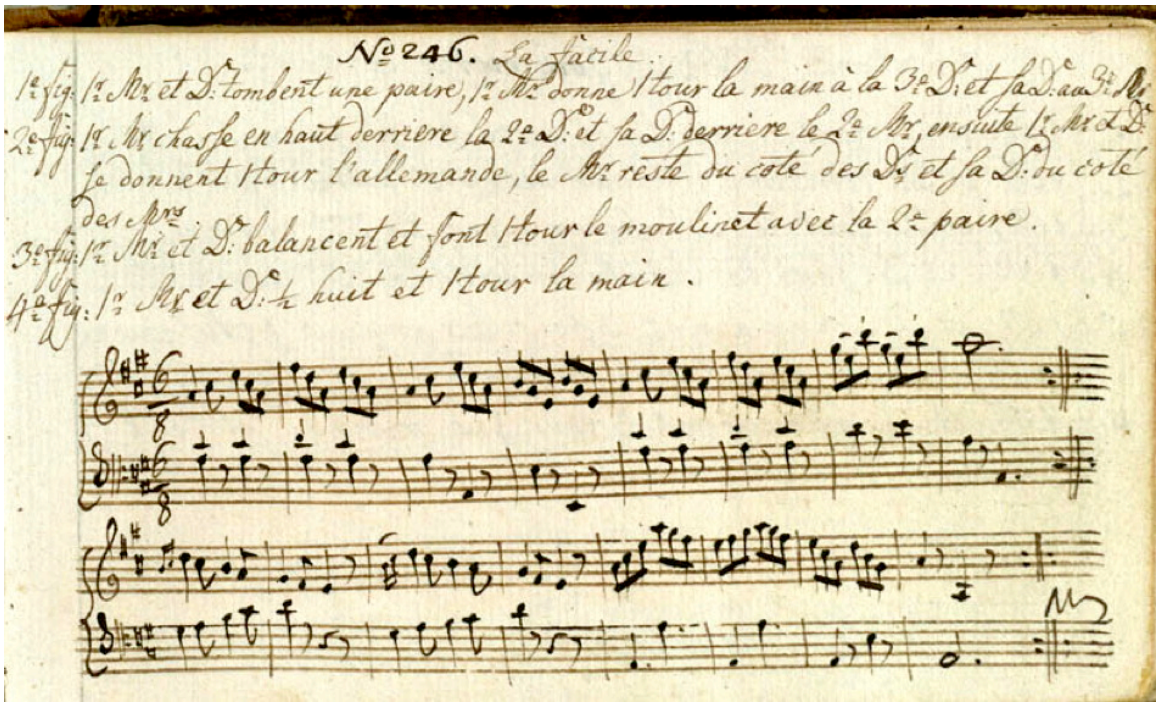


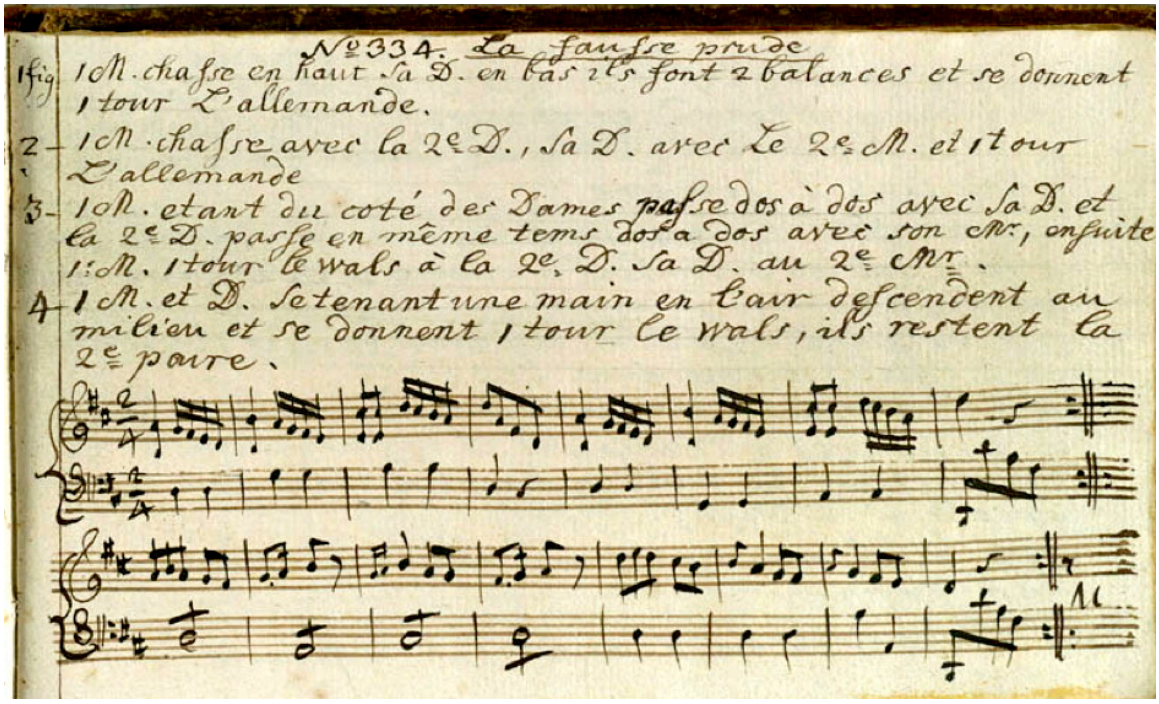
5: from the 1780 collection. The compilation books from the 1780s contain dance instructions in addition to the melodies, in the manner of many dance folio publications going back to John Playford's *Dancing Master*. Were it not for the examples above, one might have said that the first strain of the tune *Le mardi gras* is as simple an example as one might ever find of the ^5/^3 - ^4/^2 - ^3/^1 figure with a suppressed but "audible" ^3 at the end. The second strain, on the other hand, plays on overlap-style figures throughout, with a simple line at the end.

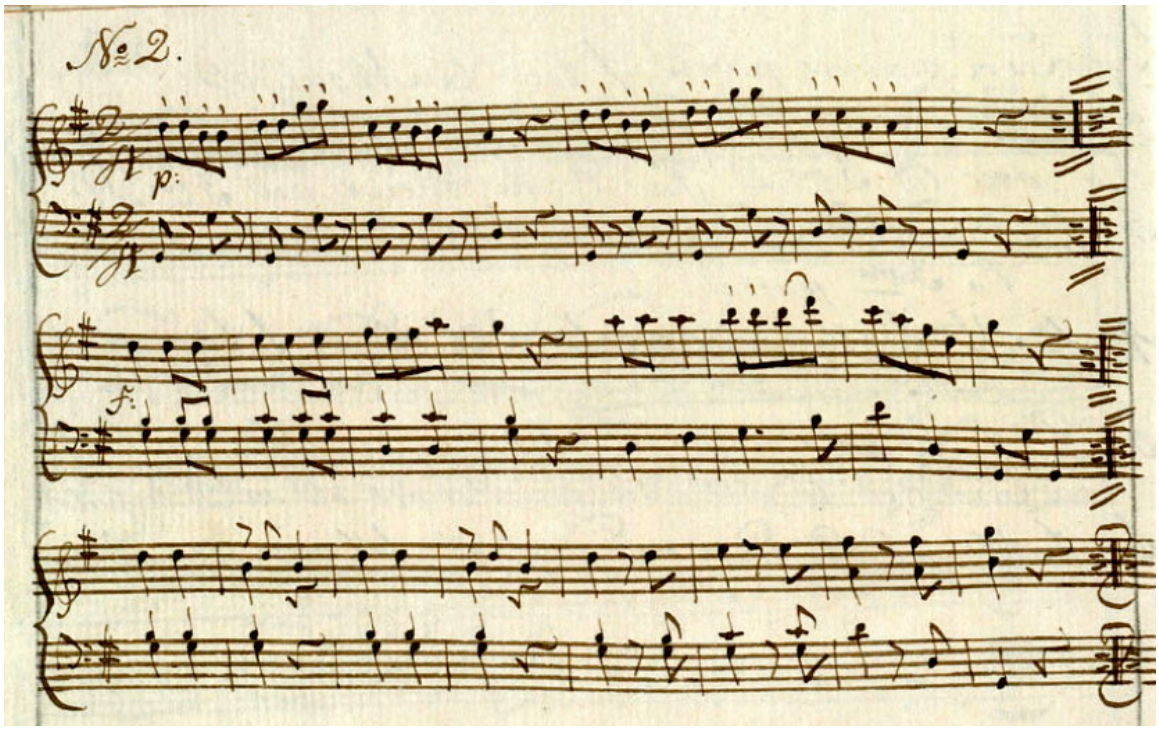


6-9: From later collections (1785, 1787, 1792). The later compilations include a bass part along with the melody. *La Generation*: an unusual missing ^3 in ^5/^3 - ^4/^2 - ^3/^1 - ^7/^2 in the first phrase, but a clear suppressed ^3 in the cadence. *La Facile*: the first strain is a balanced three-pitch design: A-C#-E goes up to A-D-F# then down to G#-B-E. The cadence is probably a simple rising line: the first half of m. 7 looks to be corrupt; it is more likely F#5-D5-B5 (here is a case where the bass helps). *La paupre prude* (?): a rising line in the first strain; in the second, more neighboring play as in but in third pairs ^5/^3 - ^6/^4. The final phrase of the second strain thoroughly mingles lines with thirds and the suppressed ^3 at the end. And "No. 2": an interesting problem in the first strain: ^5/^3 - ^4/^2 is repeated and one has to assume that a resolution of the ^4 (as 7 of V^7) takes place "across" the figure—that is, the "upper" ^4 resolves into the "lower" ^3, or another overlap gesture but moving "under" rather than "over." After this, the closing suppressed ^3 is plain enough.


N° 237. La Generation.
1re fig: 1rs Mrs et Ds: se tenant la main droite en l'air font 4 balancés et tombent une paire.
2e fig: 1rs Mrs et Ds: se tenant la main gauche en l'air font 4 balancés et retombent en montant revenant à leur 1re place.
3e fig: 1rs Mrs et Ds: chassent l'un devant l'autre et le Mr donne 1tour l'allemande à la 2de D: sa D: au 2d Mr
4e fig: 1rs Mrs et Ds: 1/2 huit et 1tour les 2 mains.


N°246. La facile
1re fig: 1rs Mrs et Ds: tombent une paire, 1r Mr donne 1tour la main à la 3e D: et sa D: au 3e Mr
2e fig: 1r Mr chasse en haut derriere la 2de D: et sa D: derriere le 2d Mr, ensuite 1r Mr et D: se donnent 1tour l'allemande, le Mr reste du côté des Ds et sa D: du côté des Mrs
3e fig: 1rs Mrs et Ds: balancent et font 1tour le moulinet avec la 2de paire.
4e fig: 1rs Mrs et Ds: 1/2 huit et 1tour la main.


№ 334. La fausse prude
1 fig. 1er M. chasse en haut sa D. en bas 2 Ls font 2 balances et se donnent 1 tour L'allemande.
2 - 1er M. chasse avec la 2e D., sa D. avec Le 2e M. et 1 tour L'allemande
3 - 1er M. etant du coté des Dames passe dos à dos avec sa D. et la 2e D. passe en même tems dos a dos avec son Mr., ensuite 1er M. 1 tour le wals à la 2e D. sa D. au 2e Mr.
4 - 1 M. et D. se tenant une main en l'air descendent au milieu et se donnent 1 tour le wals, ils restent la 2e paire.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